



Second Quarter 2005 Groundwater Monitoring Report

**Pierson Building Center
Eureka, California
Case No. 12105**

Prepared for:

Pierson Investment Company

***SEW* Consulting Engineers & Geologists, Inc.**

812 W. Wabash
Eureka, CA 95501-2138
707/441-8855

May 2005
091148



CONSULTING ENGINEERS & GEOLOGISTS, INC.

812 W. Wabash • Eureka, CA 95501-2138 • 707-441-8855 • Fax 707-441-8877 • info@shn-eureka.com

Reference: 091148.100

May 31, 2005

Mr. Robert Stone
Humboldt County Division of Environmental Health
100 H St., Suite 100
Eureka, CA 95501

Subject: Second Quarter 2005 Groundwater Monitoring Report, Pierson Building Center, Eureka, California; Case No. 12105

Dear Mr. Stone:

Presented herein are the results of the second quarter 2005 groundwater monitoring event conducted for the Pierson Building Center, 4100 Broadway, Eureka, California. Groundwater was monitored on April 1, 2005. Groundwater monitoring was performed by SHN Consulting Engineers & Geologists, Inc. (SHN) at the request of the Humboldt County Division of Environmental Health (HCDEH).

SHN is recommending closure for the site. Unless directed by the HCDEH, no future monitoring events are planned for the site.

If you have any questions, please call Roland Rueber or me at 707/441-8855.

Sincerely,

SHN Consulting Engineers & Geologists, Inc.

Patrick Barsanti
Project Manager

PNB/ADM/RMR:lms

Enclosure: Report

copy w/encl: Morgan Randall, Pierson Building Center
Bonnie Rolandelli, RWQCB
Andrew Locicero, Blue Rock Environmental
UST Cleanup Fund

Reference: 091148.100

Second Quarter 2005 Groundwater Monitoring Report

**Pierson Building Center
Eureka, California
Case No. 12105**

Prepared for:

Pierson Investment Company



**Consulting Engineers & Geologists, Inc.
812 W. Wabash
Eureka, CA 95501-2138
707/441-8855**

May 2005

QA/QC:JJA_____

Table of Contents

	Page
1.0 Introduction.....	1
1.1 Organization of the Report	1
1.2 Site Location	1
1.3 Site History	1
1.4 Objective	2
2.0 Field Activities	2
2.1 Monitoring Well Sampling.....	2
2.2 Laboratory Analysis.....	2
2.3 Equipment Decontamination Procedures.....	3
2.4 Investigation-Derived Waste Management.....	3
3.0 Groundwater Monitoring Results.....	3
3.1 Hydrogeology	3
3.2 Groundwater Analytical Results.....	4
3.3 Natural Attenuation Parameters.....	5
4.0 Conclusions	5
5.0 Recommendations	6
6.0 References Cited	7

Appendices

- A. Field Notes
- B. Historic Monitoring Data
- C. Laboratory Analytical Reports

List of Illustrations

Figures	Follows Page
1. Site Location Map.....	1
2. Site Plan.....	1
3. Groundwater Contours, April 1, 2005.....	3
4. Groundwater Analytical Results, April 1, 2005.....	4

Tables	Page
1. Groundwater Elevations, April 1, 2005	3
2. Groundwater Analytical Results, April 1, 2005.....	4
3. DO, DCO ₂ , and ORP Measurement Results, April 1, 2005.....	5

Abbreviations and Acronyms

<	denotes a value that is “less than” the method detection limit
mg/L	milligrams per Liter
mV	millivolts
ppb	parts per billion
ppm	parts per million
ug/L	micrograms per Liter
APN	Assessor’s Parcel Number
BTS	Bishop’s Truck Stop
DCO ₂	Dissolved Carbon Dioxide
DO	Dissolved Oxygen
EC	Electrical Conductivity
EPA	Environmental Protection Agency
HCDEH	Humboldt County Division of Environmental Health
MNA	Monitored Natural Attenuation
DOT	Department of Transportation
MSL	Mean Sea Level
MW-#	Monitoring Well-#
NA	Not Analyzed
NM	Not Measured
ORP	Oxidation-Reduction Potential
PBC	Pierson Building Center
RWQCB	California Regional Water Quality Control Board, North Coast Region
SHN	SHN Consulting Engineers & Geologists, Inc.
TPHD	Total Petroleum Hydrocarbons as Diesel
TPHG	Total Petroleum Hydrocarbons as Gasoline
TPHPT	Total Petroleum Hydrocarbons as Paint Thinner
UST	Underground Storage Tank

1.0 Introduction

SHN Consulting Engineers & Geologists, Inc. (SHN) is submitting this quarterly groundwater monitoring report on behalf of Pierson Building Center (PBC) for the second quarter of 2005. This work was performed as requested by the Humboldt County Division of Environmental Health (HCDEH).

1.1 Organization of the Report

This report is presented in five sections. This section serves as an introduction for the report and includes site history, and the objective of the work conducted at the site. Section 2.0 presents the scope of work that occurred during the second quarter 2005, groundwater-monitoring event. Section 3.0 discusses the results of the groundwater-monitoring event. Section 4.0 presents conclusions regarding the current status of the site. Section 5.0 presents site recommendations. Section 6.0 presents selected references.

1.2 Site Location

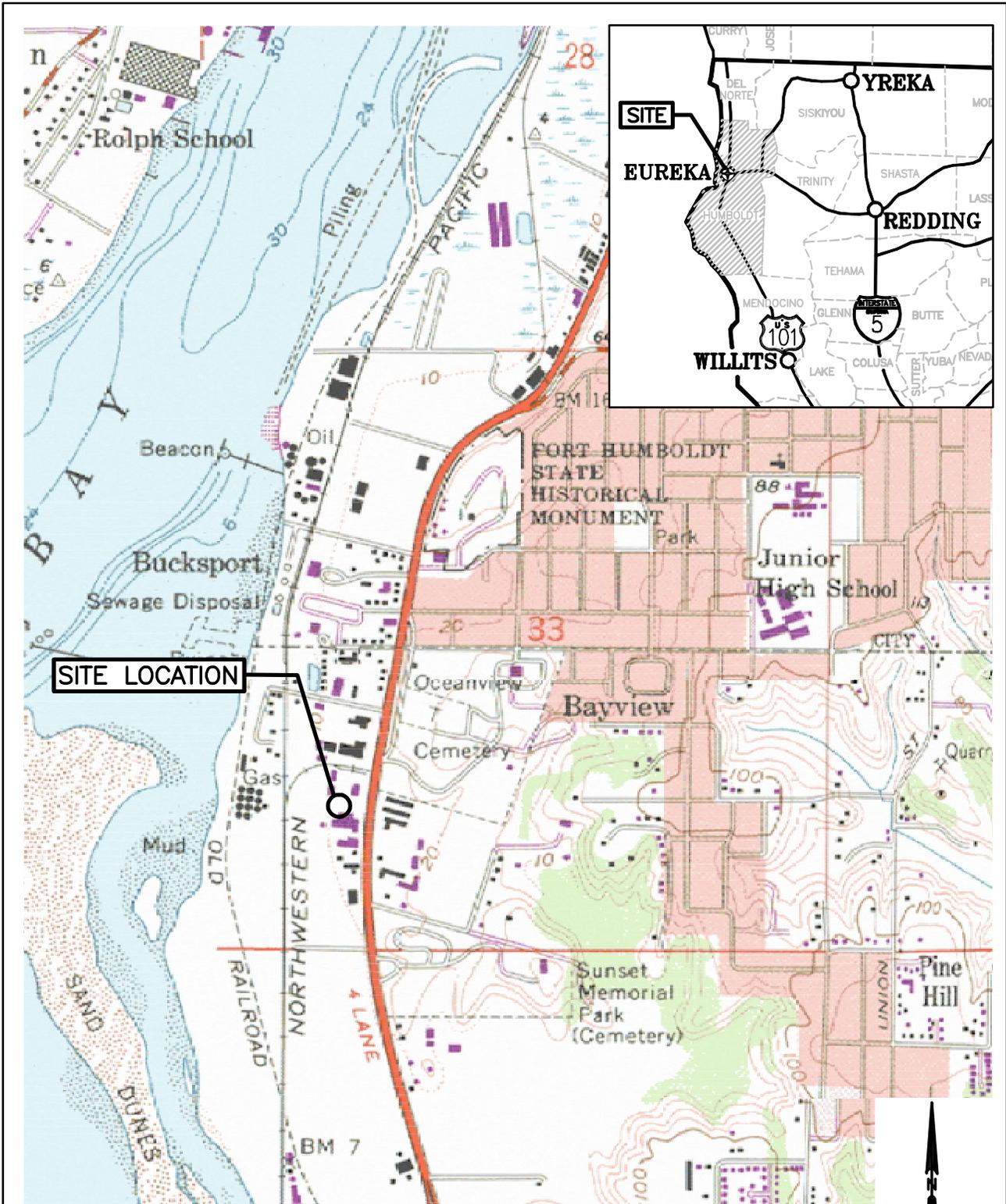
The PBC site is located at 4100 South Broadway in the City of Eureka, Humboldt County, California (Assessor's Parcel Number [APN] 019-251-04). The site is located within the southwest 1/4 of Township 5 North, Range 1 West, Section 33, Humboldt Base and Meridian (Figure 1). One former Underground Storage Tank (UST) was located at the northern boundary of the property (Figure 2).

The Bishop's Truck Stop (BTS) site is located at 4050 Broadway, adjacent to, and north of the Pierson property (APN 019-251-06). The BTS site is a full service fueling station, and USTs exist on site. The site previously contained 4 motor fuel USTs that were located along the southern property boundary, immediately adjacent to, and northeast of, PBC's former UST location (Figure 2). The BTS site is currently under investigation, and several borings and monitoring wells have been installed, and are regularly monitored and sampled. Blue Rock Environmental is the present consultant for Tamo and Renner, both of the Responsible Parties for the BTS site. Big Oil and Tire is the current property owner, and is currently investigating the area adjacent to the existing USTs for hydrocarbon releases. Other businesses that operate on this adjacent site include: Gosselin Trucking, Masterson Communications, Pocket of Posies flower shop, and a freight storage and transfer business. Additionally, there was a former petroleum bulk tank farm located at the western portion of the BTS site.

1.3 Site History

PBC is a retail hardware and lumber supply store that has operated at this location since 1946. PBC installed a 550-gallon UST in 1975, to store bulk paint thinner for retail sale. The paint thinner, product name "Mineral Spirits 75," was obtained from Unocal Corporation. The permitted UST was used exclusively for paint thinner storage until 1987.

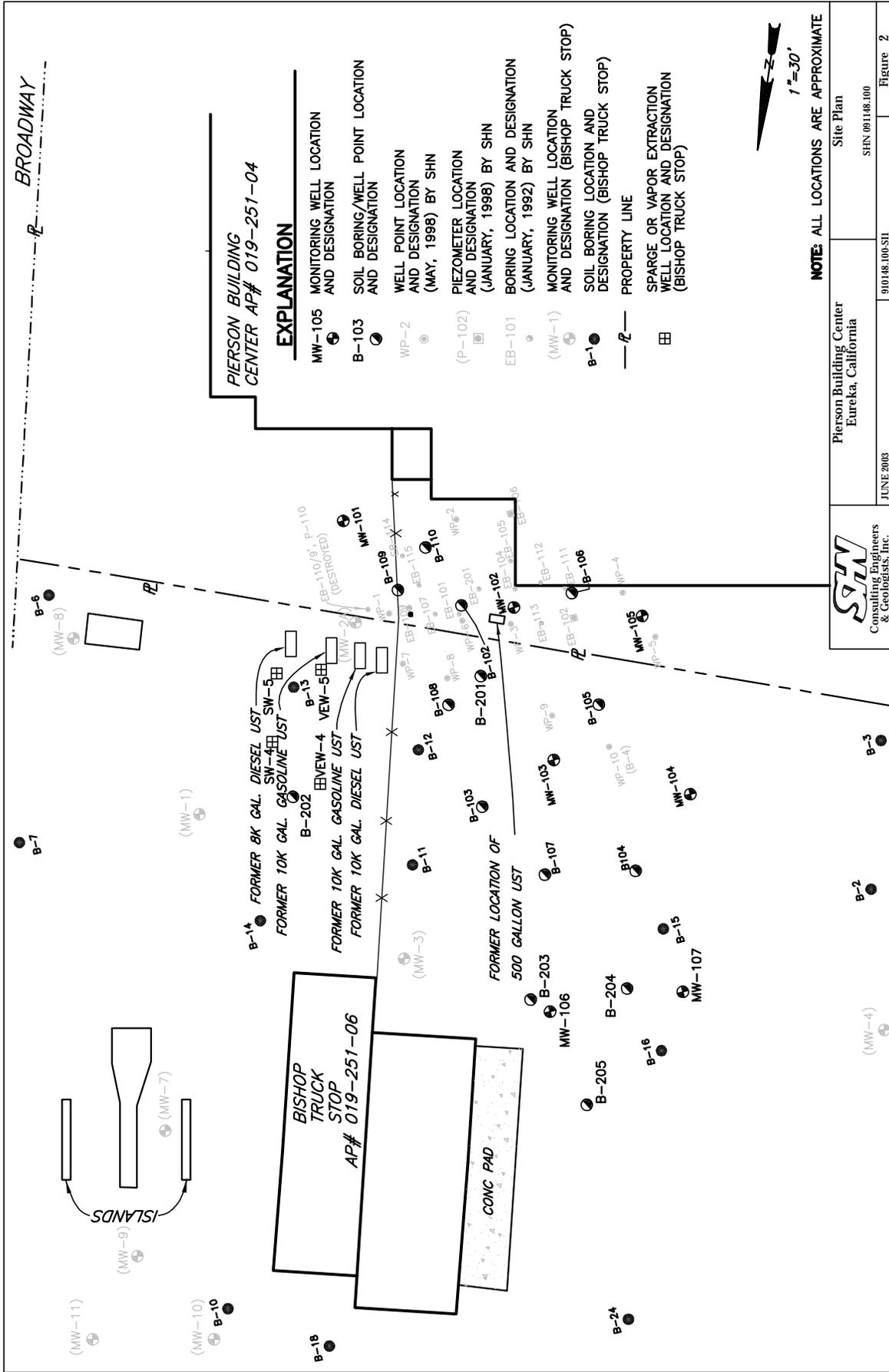
An application for a permit to abandon the paint thinner UST was submitted to the HCDEH on April 29, 1987. In November 1987, the UST was closed in-place by Beacom Construction Company, and filled with concrete. The tank was subsequently removed from the PBC site in April 1990.



SOURCE: EUREKA
USGS 7.5 MINUTE
QUADRANGLE

1"=2000'±

	Pierson Building Center Eureka, California		Site Location Map SHN 091148.100	
	February, 2005	091148.100-LOCATION	Figure 1	



Several subsurface investigations have been performed at both the PBC site and neighboring BTS site. Based on the results of the previous investigations, there is a commingled plume of paint thinner from the PBC site, and diesel fuel and gasoline from the adjacent BTS site. A detailed description of previous site activities is presented in the 2001 *Subsurface Investigation, Monitoring Well Installation, and Groundwater Monitoring Report* (SHN, 2001).

On February 3 through 6, 2003, SHN supervised the injection of approximately 6,580 gallons of BioJet's® proprietary biosolution into the subsurface of the PBC site, as part of the on-going remedial action for the site (SHN, 2003). On June 22, 2004, SHN supervised the injection of an additional 1,580 gallons of the biosolution into the subsurface (SHN, August 2004).

On December 1, 2004, the California Regional Water Quality Control Board, North Coast Region (RWQCB) rescinded Waste Discharge Requirements Order No. R1-2002-0110, and monitoring and reporting program Order No. R1-2004-0058.

Quarterly groundwater monitoring at the PBC site is ongoing, as requested by the HCDEH.

1.4 Objective

The objective of this investigation is to monitor groundwater at the PBC site in order to assess the effectiveness of the remedial action activities.

2.0 Field Activities

2.1 Monitoring Well Sampling

SHN conducted quarterly groundwater monitoring on April 1, 2005. As part of the monitoring program, all seven monitoring wells (MW-101 through MW-107) were purged and sampled (Figure 2). Prior to purging, each monitoring well was measured for depth to water, and checked for the presence of floating product (none was observed). Electrical Conductivity (EC), pH, and temperature were monitored periodically during purging activities using portable instruments.

Each well was also measured for Dissolved Oxygen (DO), Oxidation-Reduction Potential (ORP), and Dissolved Carbon Dioxide (DCO₂). A groundwater sample was then collected from each well using a disposable polyethylene bailer, and then transferred into laboratory-supplied bottles. The water samples were immediately placed in an ice-filled cooler, and submitted to the laboratory for analyses under appropriate chain-of-custody. Groundwater monitoring data sheets from the April 1, 2005, sampling event are included in Appendix A.

2.2 Laboratory Analysis

Each groundwater sample was analyzed for:

- Total Petroleum Hydrocarbons as Diesel (TPHD) (C₁₂ to C₂₂) and as Gasoline (TPHG) (C₆ to C₁₂) in general accordance with U.S. Environmental Protection Agency (EPA) Method No. 8015B
- Total Petroleum Hydrocarbons as Paint Thinner (TPHPT) (C₈ to C₁₂) in general accordance with EPA Method No. 5030

North Coast Laboratories Ltd., a state-certified analytical laboratory located in Arcata, California, performed the sample analyses.

2.3 Equipment Decontamination Procedures

All monitoring and sampling equipment was cleaned prior to being transported to the PBC site. All smaller equipment was initially washed in a water solution containing Liquinox® cleaner, followed by a distilled water rinse, then by a second distilled water rinse.

2.4 Investigation-Derived Waste Management

All rinse water used for decontaminating field-sampling equipment, and all well purge water was temporarily stored on site in an approved Department of Transportation (DOT) 17 E/H, 55-gallon drum. The water was then transported to SHN's 1,000-gallon purge water storage tank located at 812 West Wabash Avenue in Eureka, California. Approximately 43 gallons of decontamination and purge water from the April 1, 2005, sampling event was tested, and subsequently discharged, under permit, to the City of Eureka municipal sewer system. Discharge receipts for water generated during the first and second quarter 2005 groundwater monitoring events are included in Appendix A.

3.0 Groundwater Monitoring Results

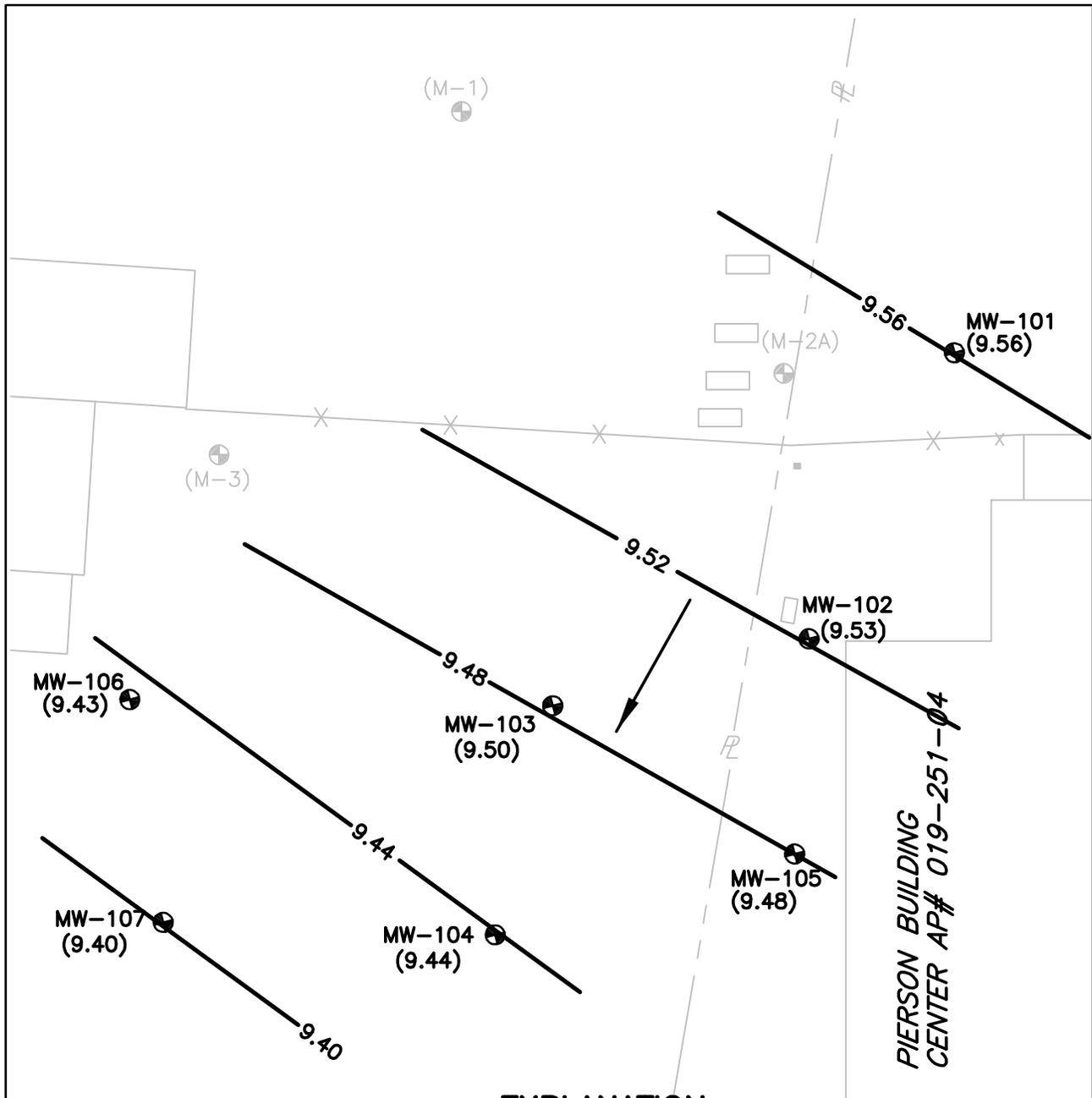
3.1 Hydrogeology

On April 1, 2005, SHN measured depth-to-groundwater in the existing monitoring wells (Table 1).

Sample Location	Top of Casing Elevation (feet MSL ¹)	Depth to Groundwater ² (feet)	Groundwater Elevation (feet MSL)
MW-101	15.69	6.13	9.56
MW-102	14.81	5.28	9.53
MW-103	14.83	5.33	9.50
MW-104	14.09	4.65	9.44
MW-105	13.78	4.30	9.48
MW-106	15.59	6.16	9.43
MW-107	14.28	4.88	9.40

1. MSL: Mean Sea Level
2. Below top of casing

During this monitoring event, the direction of groundwater flow beneath the PBC site was to the northwest, with an estimated gradient of 0.001 feet per foot. A groundwater contour map for the April 1, 2005, monitoring event is presented as Figure 3. Historic groundwater elevation data are presented in Appendix B, Table B-1.



EXPLANATION

- MW-105 MONITORING WELL LOCATION AND DESIGNATION
- (M-1) MONITORING WELL LOCATION AND DESIGNATION (BISHOP TRUCK SHOP)
- P — PROPERTY LINE
- (9.44) GROUNDWATER ELEVATION (FEET MSL)
- 9.44- GROUNDWATER CONTOUR (FEET MSL)
- ← GROUNDWATER FLOW DIRECTION

1"=30'

	Pierson Building Center Eureka, California		Groundwater Contours April 1, 2005 SHN 091148.100	
	APRIL 2005	910148.100-GWC-APR-05	Figure 3	

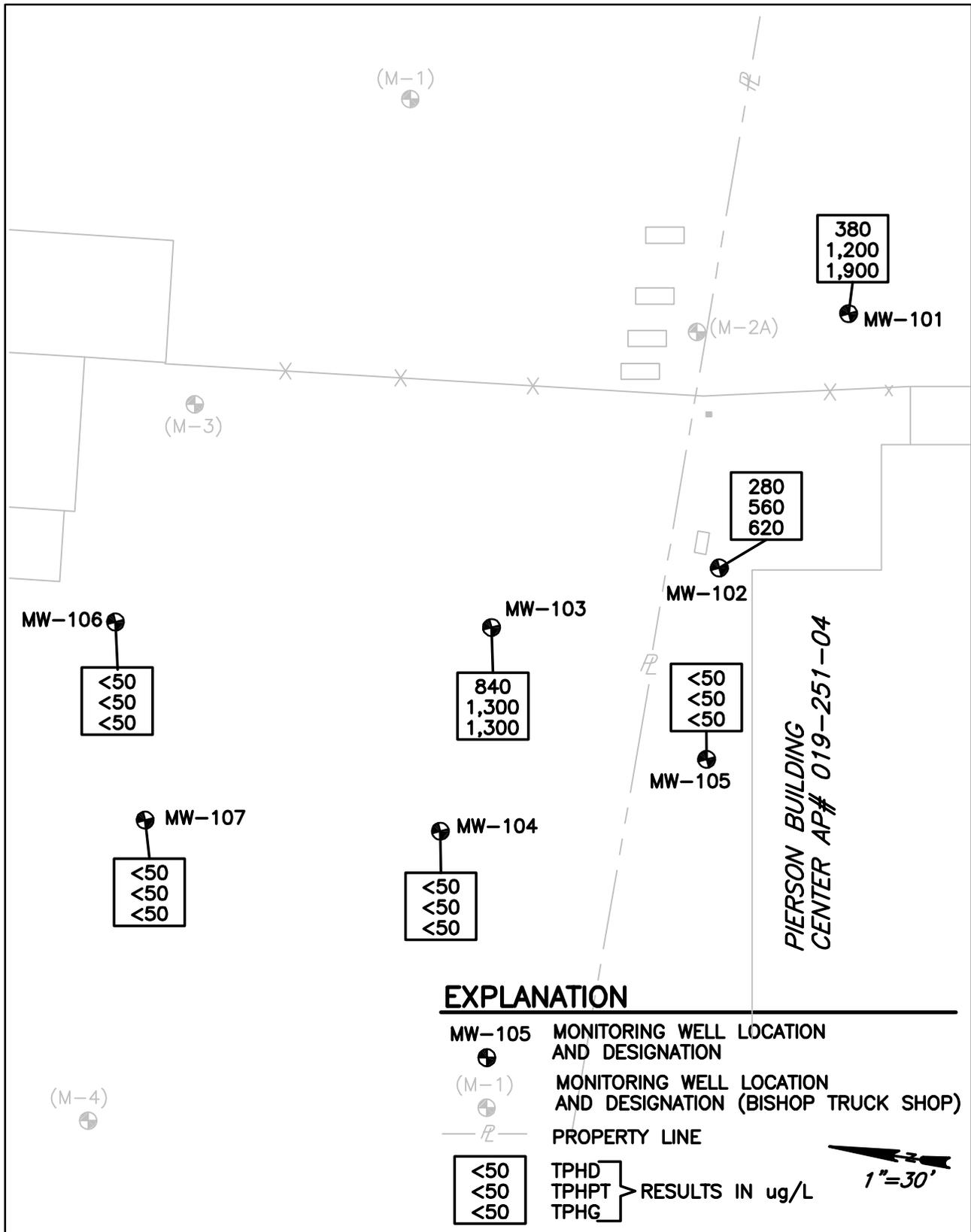
3.2 Groundwater Analytical Results

The groundwater analytical data for the April 1, 2005, monitoring event are summarized in Table 2.

Table 2 Groundwater Analytical Results, April 1, 2005 Pierson Building Center, Eureka, California (in ug/L)¹			
Sample Location	TPHD ²	TPHPT ³	TPHG ⁴
MW-101	380 ⁵	1,200 ⁶	1,900 ⁷
MW-102	280 ⁵	560 ⁶	620 ⁷
MW-103	840 ⁵	1,300 ⁶	1,300 ⁷
MW-104	<50 ⁸	<50	<50
MW-105	<50	<50	<50
MW-106	<50	<50	<50
MW-107	<50	<50	<50

1. ug/L: micrograms per Liter
2. TPHD: Total Petroleum Hydrocarbons as Diesel, analyzed in general accordance with EPA Method No. 8015B.
3. TPHPT: Total Petroleum Hydrocarbons as Paint Thinner, analyzed in general accordance with EPA Method No. 5030/GCFID.
4. TPHG: Total Petroleum Hydrocarbons as Gasoline, analyzed in general accordance with EPA Method No. 8015B.
5. Sample contains some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights. Sample also contains material in the diesel range of molecular weights, but the material does not exhibit the peak pattern typical of diesel oil.
6. Sample does not present a peak pattern consistent with that of paint thinner. The reported results represent the amount of material in the paint thinner range.
7. Sample does not present a peak pattern consistent with that of gasoline. The reported results represent the amount of material in the gasoline range.
8. <: denotes a value that is "less than" the method detection limit.

The groundwater samples collected from monitoring wells MW-101, MW-102, and MW-103 contained petroleum hydrocarbons in the diesel range, at concentrations of 380, 280, and 840 micrograms per Liter (ug/L), respectively. Petroleum hydrocarbons in the paint thinner range were present in these three samples, at concentrations of 1,200, 560, and 1,300 ug/L, respectively. Petroleum hydrocarbons in the gasoline range were detected in the groundwater samples from wells MW-101, MW-102, and MW-103, at concentrations of 1,900, 620, and 1,300 ug/L, respectively. The groundwater samples collected from monitoring wells MW-104, MW-105, MW-106, and MW-107 did not contain any detectable concentrations of TPHD, TPHPT, or TPHG during this monitoring event. The concentrations of TPHD, TPHPT, and TPHG in groundwater on April 1, 2005, are shown on Figure 4. The complete laboratory analytical report and corresponding chain-of-custody documentation are included in Appendix C. Historic groundwater analytical data are presented in Appendix B, Table B-2.



	Pierson Building Center Eureka, California	Groundwater Analytical Results April 1, 2005 SHN 091148.100	
	APRIL 2005	910148.100-GAR-APR-05	Figure 4

3.3 Natural Attenuation Parameters

Natural attenuation parameters DO, DCO₂, and ORP were measured in all seven groundwater-monitoring wells on April 1, 2005, prior to sampling, and are summarized in Table 3.

Sample Location	DO ¹ (ppm)	DCO ₂ ¹ (ppm) ²	ORP ¹ (mV) ³
MW-101	1.24	30	82
MW-102	0.66	60	126
MW-103	1.42	35	144
MW-104	1.50	40	134
MW-105	2.87	20	122
MW-106	0.73	55	116
MW-107	0.78	60	96

1. Dissolved Carbon Dioxide (DCO₂), Dissolved Oxygen (DO), and Oxidation-Reduction Potential (ORP) measured with portable equipment.
2. ppm: parts per million
3. mV: millivolts

During this monitoring event, DO concentrations ranged from 0.66 parts per million (ppm) in well MW-102, to 2.87 ppm in well MW-105. The DO concentrations indicate oxygen is being consumed within the contaminant plumes. DCO₂ concentrations ranged from 20 ppm in well MW-105, to 60 ppm in wells MW-102 and MW-107, and indicate that biodegradation is occurring at the site. ORP measurements ranged from 82 millivolts (mV) in well MW-101, to 144 mV in well MW-103, and indicate that mildly oxidizing conditions exist in site wells. Historic DO, DCO₂, and ORP measurements are presented in Appendix B, Table B-5.

4.0 Conclusions

- When compared to results from the previous sampling event, petroleum hydrocarbon concentrations have increased slightly in the groundwater samples collected from monitoring wells MW-101, MW-102, and MW-103.
- In the First Quarter 2005 Groundwater Monitoring Report for the Bishop Truck Shop (Blue Rock, 2005), Figure 4 shows the extent of TPHG at the BTS site. Based on the TPHG contour lines shown on the Figure, MW-101, MW-102, and MW-103 appear to have been impacted by the release at the BTS site. Isooctane (an additive to gasoline) was detected in groundwater samples from BTS site monitoring well MW-2A, and PBC monitoring wells MW-101 and MW-103 at concentrations of 97, 20, and 5 parts per billion (ppb), respectively (SHN, March 2004).
- Monitored Natural Attenuation (MNA) will continue to reduce the mass and concentrations of TPHPT in groundwater over time and distance from the source of contamination due to naturally occurring physical, chemical, and biological processes. The documented loss of contaminants in monitoring wells has continued over time, and the geochemical analytical data in site wells indicate biologic degradation of hydrocarbons. Petroleum hydrocarbons have not been detected in any groundwater samples collected from MW-104 and MW-105, which are downgradient of the former paint thinner UST.

- Based on the results of the hydrocarbon fingerprinting, groundwater flow directions, and contaminant concentrations, the magnitude of the release from the former Bishop UST complex is much greater than that from the Pierson UST. The release from the former Bishop UST complex has impacted groundwater in the vicinity of monitoring wells MW-101 (upgradient of the paint thinner release on PBC property), and MW-103 (downgradient of the paint thinner release), and possibly MW-102.

5.0 Recommendations

As stated in the previous groundwater monitoring report, SHN is recommending the site for closure. The rationale for closure is as follows:

- The source of contamination (paint thinner UST) has been removed. The UST was used exclusively for paint thinner storage. Benzene has not been detected in any groundwater samples from PBC monitoring wells MW-101 through MW-107.
- The site has been adequately characterized. The extent of soil and groundwater contamination related to the former paint thinner UST has been defined.
- The groundwater gradient at the site is relatively flat, and groundwater flow direction has been consistently to the west or northwest.
- Petroleum hydrocarbons have not been detected in monitoring wells MW-104 and MW-105, which are located downgradient of the former paint thinner UST.
- Based on the results of the hydrocarbon fingerprinting, groundwater flow directions, and contaminant concentrations, the magnitude of the release from the former Bishop UST complex is much greater than that from the Pierson UST. The gasoline release from the former Bishop UST complex has impacted groundwater in the vicinity of monitoring wells MW-2A, MW-101 (upgradient of the paint thinner release on PBC property), MW-103 (downgradient of the paint thinner release), and possibly MW-102. The presence of gasoline in MW-2A, MW-101, and MW-103 is confirmed by the presence of iso-octane, an octane-enhancing additive used in gasoline manufacturing (SHN, March 2004).
- The injection of BioJet's[®] proprietary biosolution has been effective in enhancing the population of selective hydrocarbon degrading organisms. However, due to the impact from the former Bishop UST complex, petroleum hydrocarbons continue to be detected in groundwater at the PBC site.
- The active remediation occurring at the BTS site will continue to remove petroleum hydrocarbons that have migrated onto the Pierson site, and will remove the BTS site source in the vicinity of MW-2A, contributing to contamination in MW-101 and MW-103.
- Natural attenuation mechanisms are active at the site, and will continue to degrade residual groundwater contamination.
- No sensitive receptors have been, or are likely to be, impacted from the former paint thinner UST.
- The majority of the site is capped and, therefore, any potential exposure to residual soil contamination related to the former paint thinner UST has been mitigated. If any subsurface construction occurs in this area, any petroleum hydrocarbon impacted soil will be disposed of appropriately.

In summary, the site has been adequately characterized, remediated, and has successfully demonstrated, through verification monitoring, that no threat to sensitive receptors is present. The PBC property has been impacted by contamination from the BTS site.

Therefore, SHN recommends that the HCDEH and the RWQCB issue a “no further action” letter for the Pierson site. Upon approval of the “no further action” letter, SHN will coordinate the destruction of the monitoring wells at the site. SHN will immediately discontinue groundwater monitoring; no further activities are scheduled to occur at the site.

6.0 References Cited

Blue Rock Environmental Inc. (April, 2005). *First Quarter 2005 Groundwater Monitoring-Remedial System Operation Report, Bishop's Truck Stop, 4050 Broadway, Eureka, California, LOP #12065*. Eureka:Blue Rock.

SHN Consulting Engineers & Geologists, Inc. (June 2001). *Subsurface Investigation, Monitoring Well Installation, and Groundwater Monitoring Report, Pierson Building Center, 4100 Broadway, Eureka, California*. Eureka: SHN.

--- (June 2002). *Additional Subsurface Investigation and BioJet Bench Scale Test Results, Pierson Building Center, 4100 Broadway, Eureka, California*. Eureka: SHN.

--- (February 2003). *Remedial Action Implementation Report, Pierson Building Center, 4100 Broadway, Eureka, California*. Eureka: SHN.

--- (March 2004). *First Quarter 2004 Groundwater Monitoring Report 4100 Broadway, Eureka, California*. Eureka: SHN.

--- (August 2004). *Third Quarter 2004 Groundwater Monitoring and Additional Biojet[®] Injection Report 4100 Broadway, Eureka, California*. Eureka: SHN.

--- (November 2004). *Fourth Quarter 2004 Groundwater Monitoring Report 4100 Broadway, Eureka, California*. Eureka: SHN.



CONSULTING ENGINEERS & GEOLOGISTS, INC.

480 Hemsted Drive • Redding, CA 96002 • Tel: 530.221.5424 • FAX: 530.221.0135 • E-mail: shninfo@shn-redding.com
812 W. Wabash • Eureka, CA 95501 • Tel: 707.441.8855 • FAX: 707.441.8877 • E-mail: shninfo@shn-engr.com

DAILY FIELD REPORT

JOB NO 091148.100

Page 1 of 11

PROJECT NAME <i>Pierson's</i>	CLIENT/OWNER <i>Pierson's Building Center</i>	DAILY FIELD REPORT SEQUENCE NO <i>1</i>	
GENERAL LOCATION OF WORK <i>Eureka, CA.</i>	OWNER/CLIENT REPRESENTATIVE <i>Morgan Randall</i>	DATE <i>4-1-05</i>	DAY OF WEEK <i>Friday</i>
TYPE OF WORK <i>Quarterly Sampling</i>	WEATHER <i>Overcast</i>	PROJECT ENGINEER / SUPERVISOR <i>Pat Brusanti / Roland Rueber</i>	
SOURCE & DESCRIPTION OF FILL MATERIAL	KEY PERSONS CONTACTED	TECHNICIAN <i>David R. Paine</i>	

DESCRIBE EQUIPMENT USED FOR HAULING, SPREADING, WATERING, CONDITIONING, & COMPACTING

0813 arrived at site removed lids and caps on all 7 wells, all 7 wells had water in flush mounts, bailed out.

0849 I started taking water levels deconing the sondes after each well by scrubbing it with liquorin then rinsing it with DI water.

0910 I started taking D O readings

1007 I started purging mw-106 with a disposable bailer, purge water was caught in a graduated 5 gal. bucket.

1035 I sampled mw-106, secured well with cap and lid.

1042 I started purging mw-107 with a disposable bailer, purge water was caught in a graduated 5 gal. bucket.

1120 I sampled mw-107, secured well with cap and lid.

1139 I started purging mw-105 with a disposable bailer, purge water was caught in a graduated 5 gal. bucket.

1210 I sampled mw-105, secured well with cap and lid.

1215 I started purging mw-104 with a disposable bailer, purge water was caught in a graduated 5 gal. bucket.

1245 I sampled mw-104, secured well with cap and lid.

1251 I started purging mw-103 with a disposable bailer, purge water was caught in a graduated 5 gal. bucket.

1325 I sampled mw-103, secured well with cap and lid.

1337 I started purging mw-102 with a disposable bailer, purge water was caught in a graduated 5 gal. bucket.

1405 I sampled mw-102, secured well with cap and lid.

1412 I started purging mw-101 with a disposable bailer, purge water was caught in a graduated 5 gal. bucket.

1440 I sampled mw-101, secured well with cap and lid.

1451 OFF SITE

Note: All decon water and purge water was caught then poured into a 50 gal. plastic drum that I brought in the truck then transported to SHN's 1,000 gal. PWSI located at 812 W. Wabash Ave. Eureka, CA 43 gals. total.

COPY GIVEN TO:

REPORTED BY: *David R. Paine*



EQUIPMENT CALIBRATION SHEET

Name:	<u>David R. Paine</u>		
Project Name:	<u>Pierson's Building Center</u>		
Reference No.:	<u>091148.100</u>		
Date:	<u>4-1-05</u>		
Equipment:	<input checked="" type="checkbox"/> pH & EC	<input type="checkbox"/> PID	<input type="checkbox"/> GTCO ₂ <input type="checkbox"/> GTLEL
	<input type="checkbox"/> Turbidity	<input checked="" type="checkbox"/> Other	<u>Dissolved Oxygen Meter YS195</u>
Description of Calibration Procedure and Results:			
<u>pH & Ec meter is calibrated using a 2 buffer method with 7.01 and 4.01, the Ec (conductivity) is set at 1413 μS.</u>			
<u>DO meter is self calibrating with the Altimeter set at 0.</u>			



Water Sampling Data Sheet

Project Name:	<u>Picason's Building Center</u>	Date/Time:	<u>4-1-05</u>
Project No.:	<u>091148.100</u>	Sampler Name:	<u>David R. Paine</u>
Location:	<u>Eureka, CA</u>	Sample Type:	<u>Ground water</u>
Well #:	<u>MW-101</u>	Weather:	<u>Overcast</u>
Hydrocarbon Thickness/Depth (feet):	<u>NA</u>	Key Needed:	<u>YES Dolphin</u>

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
<u>14.10</u>	-	<u>6.13</u>	=	<u>7.97</u>	x	<u>0.163</u>	=	<u>1.30</u>

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
<u>0959</u>	<u>1.24</u>						<u>0 gal</u>	
<u>1412</u>	↓	<u>30</u>	<u>82</u>				<u>0.25 gal</u>	
<u>1421</u>	↓			<u>164</u>	<u>57.5°</u>	<u>6.41</u>	<u>1.50 gal</u>	
<u>1426</u>	<u>No Flow</u>			<u>163</u>	<u>57.7°</u>	<u>6.42</u>	<u>2.75 gal</u>	
<u>1430</u>	<u>then cell</u>			<u>165</u>	<u>57.6°</u>	<u>6.46</u>	<u>4 gal</u>	
<u>1440</u>	<u>Sample Time</u>							

Purge Method: Hand Bail

Total Volume Removed: 4.00 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
<u>MW-101</u>	<u>3-40ml UOA's</u>	<u>YES HCL</u>	<u>NCL</u>	<u>TPHG</u>
<u>MW-101</u>	<u>3-40ml UOA's</u>	<u>YES HCL</u>	<u>NCL</u>	<u>TPH- Paint Thinner</u>
<u>MW-101</u>	<u>2-60ml UOA's</u>	<u>None</u>	<u>NCL</u>	<u>TPHD</u>

Well Condition: One broken flange and One stripped out flange

Remarks:

Recharged to 6.18 at sample Time



Water Sampling Data Sheet

Project Name: Pickson's Building Center Date/Time: 4-1-05
 Project No.: 091148.100 Sampler Name: David R. Payne
 Location: Eureka, CA Sample Type: Ground water
 Well #: MW-102 Weather: Overcast
 Hydrocarbon Thickness/Depth (feet): NA Key Needed: YES Dolphin

Total Well Depth (feet) - Initial Depth to Water (feet) = Height of Water Column (feet) x 0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well) = 1 Casing Volume (gal)
14.10 - 5.28 = 8.82 x 0.163 = 1.44

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0952	0.66						0 gal	
1337	↓	60	126				0.25 gal	
1346	↓			426	56.1°	6.08	150 gal	
1351	No Flow			444	56.1°	6.09	3 gal	
1356	then cell			446	56.2°	6.07	450 gal	
1405	Sample Time							

Purge Method: Hand Bail

Total Volume Removed: 4.50 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-102	3-40ml UOH's	YES HCL	NCL	TPHG
MW-102	3-40ml UOH's	YES HCL	NCL	TPH- Paint Thinner
MW-102	2-60ml UOH's	None	NCL	TPHD

Well Condition: One broken flange

Remarks:

Recharged to 5.31 at sample time



Water Sampling Data Sheet

Project Name: Pearson's Building Center Date/Time: 4-1-05
 Project No.: 091148.100 Sampler Name: David R. Payne
 Location: Eureka, CA Sample Type: Ground water
 Well #: MW-103 Weather: Overcast
 Hydrocarbon Thickness/Depth (feet): NA Key Needed: YES Dolphin

Total Well Depth (feet) - Initial Depth to Water (feet) = Height of Water Column (feet) × 0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well) = 1 Casing Volume (gal)
14.05 - 5.33 = 8.72 × 0.163 = 1.42

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0944	<u>1.42</u>						0 gal.	
1257	↓	<u>35</u>	<u>144</u>				0.25 gal.	
1304				<u>294</u>	<u>56.1°</u>	<u>6.00</u>	<u>1.50</u> gal.	
1309	<u>No Flow</u>			<u>310</u>	<u>56°</u>	<u>6.06</u>	<u>3</u> gal.	
1313	<u>then cell</u>			<u>334</u>	<u>56°</u>	<u>6.08</u>	<u>4.50</u> gal.	
318				<u>342</u>	<u>56°</u>	<u>6.13</u>	<u>6</u> gal.	
1325	<u>Sample Time</u>							

Purge Method: Hand Bail

Total Volume Removed: 6.00 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
<u>MW-103</u>	<u>3-40ml UOH's</u>	<u>YES HCL</u>	<u>NCL</u>	<u>TPHG</u>
<u>MW-103</u>	<u>3-40ml UOH's</u>	<u>YES HCL</u>	<u>NCL</u>	<u>TPH- Paint Thinner</u>
<u>MW-103</u>	<u>2-60ml UOH's</u>	<u>None</u>	<u>NCL</u>	<u>TPHD</u>

Well Condition: Good

Remarks:

Recharged to 5.37 at sample time



Water Sampling Data Sheet

Project Name: Pearson's Building Center Date/Time: 4-1-05
 Project No.: 091148.100 Sampler Name: David R. Paine
 Location: Eureka, CA Sample Type: Ground water
 Well #: MW-104 Weather: Overcast
 Hydrocarbon Thickness/Depth (feet): NA Key Needed: YES Dolphin

Total Well Depth (feet) - Initial Depth to Water (feet) = Height of Water Column (feet) * 0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well) = 1 Casing Volume (gal)
13.25 - 4.65 = 8.60 * 0.163 = 1.40

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0938	1.50						0 gal.	
1215	↓	40	134				0.25 gal.	
1225	↓			258	53.6°	6.13	1.50 gal.	
1229	No Flow			261	55.5°	6.12	3 gal.	
1234	thru cell			261	55.4°	6.17	4.25 gal.	
1245	Sample Time							

Purge Method: Hand Barl

Total Volume Removed: 4.25 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-104	3-40ml UOH's	YES HCL	NCL	TPHG
MW-104	3-40ml UOH's	YES HCL	NCL	TPH-Paint Thinner
MW-104	2-60ml UOH's	None	NCL	TPHD

Well Condition: Good

Remarks:

Recharged to 4.69 at sample time



Water Sampling Data Sheet

Project Name: Pickson's Building Center Date/Time: 4-1-05
 Project No.: 091148.100 Sampler Name: David R. Paine
 Location: Eureka, CA Sample Type: Ground water
 Well #: MW-105 Weather: Overcast
 Hydrocarbon Thickness/Depth (feet): NA Key Needed: YES Dolphin

Total Well Depth (feet) - Initial Depth to Water (feet) = Height of Water Column (feet) × 0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well) = 1 Casing Volume (gal)
13.40 - 4.30 = 9.10 × 0.163 = 1.48

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0930	<u>2.87</u>						0 gal	
1139		<u>20</u>	<u>122</u>				0.25 gal	
1147	↓			<u>156</u>	<u>56.1°</u>	<u>6.27</u>	<u>150</u> gal	
1152	<u>No Flow</u>			<u>154</u>	<u>56.1°</u>	<u>6.32</u>	<u>3</u> gal	
1157	<u>than cell</u>			<u>156</u>	<u>56°</u>	<u>6.30</u>	<u>450</u> gal	
1210	<u>Sample Time</u>							

Purge Method: Hand Bail Total Volume Removed: 4.50 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
<u>MW-105</u>	<u>3-40ml UOM's</u>	<u>YES HCL</u>	<u>NCL</u>	<u>TPHG</u>
<u>MW-105</u>	<u>3-40ml UOM's</u>	<u>YES HCL</u>	<u>NCL</u>	<u>TPH- Paint Thinner</u>
<u>MW-105</u>	<u>2-60ml UOM's</u>	<u>None</u>	<u>NCL</u>	<u>TPHD</u>

Well Condition: One broken flange

Remarks:

Recharged to 4.33 at sample Time



Water Sampling Data Sheet

Project Name: Pearson's Building Center Date/Time: 4-1-05
 Project No.: 091148, 100 Sampler Name: David R. Paine
 Location: Eureka, CA Sample Type: Ground water
 Well #: MW-106 Weather: Overcast
 Hydrocarbon Thickness/Depth (feet): NA Key Needed: YES Dolphin

Total Well Depth (feet) - Initial Depth to Water (feet) = Height of Water Column (feet) x 0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well) = 1 Casing Volume (gal)

14.15 - 6.16 = 7.99 x 0.163 = 1.30

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0915	<u>0.73</u>						0 gal	
1007	↓	<u>55</u>	<u>116</u>				<u>0.25</u> gal	
1017	↓			<u>461</u>	<u>59.3°</u>	<u>6.38</u>	<u>1.50</u> gal	
1021	No Flow			<u>453</u>	<u>59.1°</u>	<u>6.47</u>	<u>2.25</u> gal	
1026	thru cell			<u>441</u>	<u>59.1°</u>	<u>6.48</u>	<u>4</u> gal	
1035	<u>Sample Time</u>							

Purge Method: Hand Bail

Total Volume Removed: 4.00 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
<u>MW-106</u>	<u>3-40ml UOA's</u>	<u>YES HCL</u>	<u>NCL</u>	<u>TPHG</u>
<u>MW-106</u>	<u>3-40ml UOA's</u>	<u>YES HCL</u>	<u>NCL</u>	<u>TPH-Paint Thinner</u>
<u>MW-106</u>	<u>2-60ml UOA's</u>	<u>None</u>	<u>NCL</u>	<u>TPHD</u>

Well Condition: 2 broken flanges and 1 stripped out flange

Remarks:

Recharged to 6.19 at sample time



Water Sampling Data Sheet

Project Name: Pearson's Building Center Date/Time: 4-1-05
 Project No.: 091148.100 Sampler Name: David R. Paine
 Location: Eureka, CA Sample Type: Ground water
 Well #: MW-107 Weather: Overcast
 Hydrocarbon Thickness/Depth (feet): NA Key Needed: YES Dolphin

Total Well Depth (feet) - Initial Depth to Water (feet) = Height of Water Column (feet) × 0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well) = 1 Casing Volume (gal)
14.12 - 4.88 = 9.24 × 0.163 = 1.51

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0921	<u>0.78</u>						0 gal	
1042		<u>60</u>	<u>96</u>				0.25 gal	
1051	↓			<u>484</u>	<u>59.9°</u>	<u>6.16</u>	<u>1.25 gal</u>	
1055	<u>No flow</u>			<u>431</u>	<u>59.6°</u>	<u>6.16</u>	<u>3.25 gal</u>	
1100	<u>thru cell</u>			<u>404</u>	<u>59.5°</u>	<u>6.24</u>	<u>4.25 gal</u>	
1105				<u>383</u>	<u>59.4°</u>	<u>6.21</u>	<u>6.25 gal</u>	
1111				<u>380</u>	<u>59.5°</u>	<u>6.24</u>	<u>7.25 gal</u>	
1120	<u>Sample Time</u>							

Purge Method: Hand Bail

Total Volume Removed: 7.25 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
<u>MW-107</u>	<u>3-40ml UOH's</u>	<u>YES HCL</u>	<u>NCL</u>	<u>TPHG</u>
<u>MW-107</u>	<u>3-40ml UOH's</u>	<u>YES HCL</u>	<u>NCL</u>	<u>TPH- Paint Thinner</u>
<u>MW-107</u>	<u>2-60ml UOH's</u>	<u>None</u>	<u>NCL</u>	<u>TPHD</u>

Well Condition: ~~Good~~ One stripped out flange

Remarks: Recharged to 4.94 at sample time

Client Name: **PIERSON'S BUILDING CENTER**

The water from your site: **4100 BROADWAY EUREKA, CA
RWQCB CASE # 1THU105**

SHN ref # **091148.100** Collected On: **1/14/05**

Has been tested and certified as acceptable to be discharged into the City of Eureka municipal sewer system.

Amount Discharged: **40 GALLONS**

Date Discharged: **2/28/05**

Certified by: **DAVID R. PAINE**

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.
City of Eureka Wastewater Discharge Permit #65

Client Name: **PIERSON'S BUILDING CENTER**

The water from your site: **4100 BROADWAY EUREKA, CA
RWQCB CASE # 1THU105**

SHN ref # **091148.100** Collected On: **4/1/05**

Has been tested and certified as acceptable to be discharged into the City of Eureka municipal sewer system.

Amount Discharged: **43 GALLONS**

Date Discharged: **4/29/05**

Certified by: **DAVID R. PAINE**

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.
City of Eureka Wastewater Discharge Permit #65

Appendix B

Historic Monitoring Data

**Table B-1
Historic Groundwater Elevations
Pierson Building Center, Eureka, California**

Sample Location	Date Measured	Top of Casing Elevation (feet MSL)¹	Depth to Groundwater² (feet)	Groundwater Elevation (feet MSL)
MW-101	1/20/2003	15.69	6.07	9.62
	2/10/2003		6.10	9.59
	2/24/2003		5.93	9.76
	3/10/2003		6.15	9.54
	3/24/2003		5.98	9.71
	4/7/2003		5.80	9.89
	4/21/2003		5.78	9.91
	5/5/2003		5.64	10.05
	7/7/2003		6.64	9.05
	10/6/2003		7.31	8.38
	1/5/2004		4.92	10.77
	4/5/2004		4.68	11.01
	7/7/2004		6.98	8.71
	10/8/2004		7.61	8.08
	1/14/2005		6.21	9.48
	4/1/2005		6.13	9.56
MW-102	1/20/2003	14.81	5.25	9.56
	2/10/2003		5.28	9.53
	2/24/2003		5.08	9.73
	3/10/2003		5.32	9.49
	3/24/2003		5.14	9.67
	4/7/2003		4.94	9.87
	4/21/2003		4.94	9.87
	5/5/2003		4.78	10.03
	7/7/2003		5.80	9.01
	10/6/2003		6.50	8.31
	1/5/2004		4.50	10.31
	4/5/2004		4.12	10.69
	7/7/2004		6.12	8.69
	10/8/2004		6.77	8.04
	1/14/2005		5.38	9.43
	4/1/2005		5.28	9.53

**Table B-1
Historic Groundwater Elevations
Pierson Building Center, Eureka, California**

Sample Location	Date Measured	Top of Casing Elevation (feet MSL)¹	Depth to Groundwater² (feet)	Groundwater Elevation (feet MSL)
MW-103	1/20/2003	14.83	5.27	9.56
	2/10/2003		5.31	9.52
	2/24/2003		5.12	9.71
	3/10/2003		5.36	9.47
	3/24/2003		5.16	9.67
	4/7/2003		4.99	9.84
	4/21/2003	14.83	4.98	9.85
	5/5/2003		4.82	10.01
	7/7/2003		5.84	8.99
	10/6/2003		6.53	8.30
	1/5/2004		4.85	9.98
	4/5/2004		4.42	10.41
	7/7/2004		6.15	8.68
	10/8/2004		6.79	8.04
	1/14/2005		5.44	9.39
	4/1/2005		5.33	9.50
MW-104	1/20/2003	14.09	4.62	9.47
	2/10/2003		4.64	9.45
	2/24/2003		4.45	9.64
	3/10/2003		4.66	9.43
	3/24/2003		4.49	9.60
	4/7/2003		4.31	9.78
	4/21/2003		4.32	9.77
	5/5/2003		4.16	9.93
	7/7/2003		5.18	8.91
	10/6/2003		5.85	8.24
	1/5/2004		4.26	9.83
	4/5/2004		3.87	10.22
	7/7/2004		5.48	8.61
	10/8/2004		6.10	7.99
	1/14/2005		4.76	9.33
	4/1/2005		4.65	9.44

**Table B-1
Historic Groundwater Elevations
Pierson Building Center, Eureka, California**

Sample Location	Date Measured	Top of Casing Elevation (feet MSL)¹	Depth to Groundwater² (feet)	Groundwater Elevation (feet MSL)
MW-105	1/20/2003	13.78	4.25	9.53
	2/10/2003		4.28	9.50
	2/24/2003		4.04	9.74
	3/10/2003		4.31	9.47
	3/24/2003		4.13	9.65
	4/7/2003		3.93	9.85
	4/21/2003		3.94	9.84
	5/5/2003		3.78	10.00
	7/7/2003		4.82	8.96
	10/6/2003		5.52	8.26
	1/5/2004		3.55	10.23
	4/5/2004		3.30	10.48
	7/7/2004	13.78	5.14	8.64
	10/8/2004		5.78	8.00
	1/14/2005		4.40	9.38
	4/1/2005		4.30	9.48
MW-106	1/20/2003	15.59	6.09	9.50
	2/10/2003		6.12	9.47
	2/24/2003		4.65	10.94
	3/10/2003		6.19	9.40
	3/24/2003		5.99	9.60
	4/7/2003		5.86	9.73
	4/21/2003		5.80	9.79
	5/5/2003		5.69	9.90
	7/7/2003		6.64	8.95
	10/6/2003		7.32	8.27
	1/5/2004		6.00	9.59
	4/5/2004		5.51	10.08
	7/7/2004		6.95	8.64
	10/8/2004		7.58	8.01
	1/14/2005		6.29	9.30
	4/1/2005		6.16	9.43

**Table B-1
Historic Groundwater Elevations
Pierson Building Center, Eureka, California**

Sample Location	Date Measured	Top of Casing Elevation (feet MSL)¹	Depth to Groundwater² (feet)	Groundwater Elevation (feet MSL)
MW-107	1/20/2003	14.28	4.83	9.45
	2/10/2003		4.85	9.43
	2/24/2003		5.94	8.34
	3/10/2003		4.91	9.37
	3/24/2003		4.72	9.56
	4/7/2003		4.57	9.71
	4/21/2003		5.53	8.75
	5/5/2003		4.41	9.87
	7/7/2003		5.39	8.89
	10/6/2003		6.07	8.21
	1/5/2004		4.71	9.57
	4/5/2004		4.28	10.00
	7/7/2004		6.69	7.59
	10/8/2004		6.31	7.97
	1/14/2005		5.00	9.28
	4/1/2005		4.88	9.40
MW-2A	1/20/2003	16.81	7.21	9.60
	2/10/2003		7.24	9.57
	2/24/2003	16.81	7.06	9.75
	3/10/2003		7.30	9.51
	3/24/2003		7.13	9.68
	4/7/2003		6.94	9.87
	4/21/2003		6.93	9.88
	5/5/2003		6.79	10.02
	7/7/2003		7.79	9.02
	10/6/2003		8.45	8.36
	1/5/2004		6.36	10.45
	4/5/2004		6.08	10.73
	7/7/2004		8.13	8.68

**Table B-1
Historic Groundwater Elevations
Pierson Building Center, Eureka, California**

Sample Location	Date Measured	Top of Casing Elevation (feet MSL)¹	Depth to Groundwater² (feet)	Groundwater Elevation (feet MSL)
MW-3	1/20/2003	15.13	5.65	9.48
	2/10/2003		5.63	9.50
	2/24/2003		5.46	9.67
	3/10/2003		5.73	9.40
	3/24/2003		5.58	9.55
	4/7/2003		5.94	9.19
	4/21/2003		5.34	9.79
	5/5/2003		5.23	9.90
	7/7/2003		6.26	8.87
	10/6/2003		6.86	8.27
	1/5/2004		5.53	9.60
	4/5/2004		5.11	10.02
	7/7/2004		6.72	8.41

1. MSL: Mean Sea Level

2. Below top of casing

Table B-2

Historic Groundwater Analytical Results
Pierson Building Center, Eureka, California

Sample Location	Date	TPHD ¹ (ug/L) ²	TPHPT ³ (ug/L)	TPHC ⁴ (ug/L)	B ⁵ (ug/L)	T ⁵ (ug/L)	E ⁵ (ug/L)	X ⁵ (ug/L)	Dissolved Iron (ug/L)	Nitrate (mg/L) ⁶	Nitrite (mg/L)	Ammonia Nitrogen (mg/L)	Phosphate (mg/L)	Potassium (ug/L)	Total Organic Carbon (mg/L)		
MW-101	3/29/01	<50 ⁷	<50	120	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	
	1/20/03	130 ⁸	880 ⁹	1,400 ¹⁰	<0.50	2.3	42	89	1,000	<0.10	<0.20	<0.20	2.3	8,500	3.85	3.85	
	2/10/03	340 ^{8,12}	2,000 ⁹	3,300 ¹⁰	<2.5	2.5	110	318	800	<0.10	<0.20	<0.20	1.3	8,600	4.10	4.10	
	2/24/03	320 ^{8,12}	2,500 ⁹	4,200 ¹⁰	<2.5	<2.5	77	199	1,100	<0.10	<0.50	1.3	1.8	7,900	3.93	3.93	
	3/10/03	350 ⁸	3,500 ⁹	4,400 ¹⁰	<1.0	1.9	140	431	1,400	<0.10	<0.20	<0.20	1.7	8,400	3.83	3.83	
	3/24/03	350 ^{8,12}	1,300 ⁹	2,400 ¹⁰	<1.0	1.7	120	343	1,700	<0.10	<0.50	0.28	1.4	8,300	3.69	3.69	
	4/7/03	400 ⁸	1,200 ⁹	1,800 ¹⁰	<1.0	1.2	100	278	1,700	<0.10	<0.10	<0.20	1.4	8,500	3.66	3.66	
	4/21/03	360 ⁸	1,300 ⁹	2,000 ¹⁰	<0.50	0.91	80	149	1,300	<0.10	<0.20	<0.20	1.3	8,000	3.82	3.82	
	5/5/03	320 ^{8,12}	1,800 ⁹	2,700 ¹⁰	<1.0	<1.0	46	67.8	2,200	<0.10	<0.20	<0.20	0.93	8,100	3.55	3.55	
	7/7/03	550 ⁸	4,300 ⁹	5,900 ¹⁰	<2.0	<2.0	98	118.4	2,300	<0.10	<0.10	<0.20	1.7	6,600	3.54	3.54	
	10/6/03	370 ⁸	1,200 ⁹	3,300 ¹⁰	<0.50	1.3	17	18.1	3,100	<0.10	<0.10	0.46	1.6	7,100	4.05	4.05	
	1/5/04	1,400 ^{8,12}	23,000 ⁹	18,000 ¹⁰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/5/04	670 ^{8,12}	3,700 ⁹	5,400 ¹⁰	<0.50	<0.50	43	74.8	500	<0.10	<0.10	<0.20	0.48	<5,000	2.10	2.10	
	7/7/04	1,100 ⁸	4,600 ⁹	6,400 ¹¹	<1.0	<1.0	5.7	3.0	2,000	<0.10	<0.10	<0.20	0.78	<5,000	2.60	2.60	
	10/8/04	550 ^{8,12}	2,200 ⁹	2,800 ¹¹	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/14/05	260 ^{8,12}	960 ⁹	1,300 ¹¹	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/1/05	380 ^{8,12}	1,200 ⁹	1,900 ¹¹	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-102	3/29/01	320	1,300	1,600	<0.50	<0.50	0.95	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	
	1/20/03	180 ⁸	480 ⁹	520 ¹¹	<0.50	0.55	<0.50	<0.50	7,600	<0.10	<1.0	<0.20	0.41	7,300	8.79	8.79	
	2/10/03	180 ⁸	220 ⁹	260 ¹¹	<0.50	<0.50	<0.50	<0.50	8,900	<0.10	<1.0	<0.20	0.45	<5,000	10.50	10.50	
	2/24/03	120 ⁸	180 ⁹	200 ¹¹	<0.50	<0.50	<0.50	<0.50	6,600	<0.10	<0.50	<0.20	0.34	<5,000	10.10	10.10	
	3/10/03	130 ⁸	510 ⁹	490 ¹¹	<0.50	<0.50	<0.50	<0.50	6,100	<0.10	<1.0	<0.20	0.38	<5,000	8.30	8.30	
	3/24/03	110 ⁸	130 ⁹	140 ¹¹	<0.50	<0.50	<0.50	<0.50	2,500	<0.10	<0.50	<0.20	0.17	5,100	8.64	8.64	
	4/7/03	170 ⁸	360 ⁹	370 ¹⁰	<0.50	<0.50	<0.50	<0.50	3,800	<0.10	<1.0	<0.20	0.21	<5,000	10.10	10.10	
	4/21/03	150 ⁸	280 ⁹	290 ¹⁰	<0.50	<0.50	<0.50	<0.50	3,400	<0.10	<0.50	<0.20	0.19	<5,000	9.04	9.04	
	5/5/03	120 ^{8,12}	360 ⁹	400 ¹⁰	<0.50	<0.50	<0.50	<0.50	3,900	<0.10	<0.50	<0.20	0.38	5,000	9.13	9.13	
	7/7/03	160 ⁸	420 ⁹	440 ¹¹	<0.50	<0.50	<0.50	<0.50	5,200	<0.10	<0.10	<0.20	0.62	<5,000	5.87	5.87	
	10/6/03	75 ⁸	410 ⁹	470 ¹¹	<0.50	<0.50	<0.50	<0.50	8,700	<0.10	<0.10	<0.20	0.54	5,600	4.20	4.20	
	1/5/04	63 ¹²	66 ⁹	54 ¹¹	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/5/04	110 ¹²	370 ⁹	420 ¹¹	<0.50	<0.50	<0.50	<0.50	1,100	<0.10	<0.10	<0.20	0.63	<5,000	4.40	4.40	
	7/7/04	250 ⁸	620 ⁹	550 ¹¹	<0.50	<0.50	<0.50	<0.50	4,600	<0.10	<0.10	<0.20	0.47	5,200	2.10	2.10	
	10/8/04	200 ^{8,12}	490 ⁹	540 ¹¹	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table B-2

Historic Groundwater Analytical Results
Pierson Building Center, Eureka, California

Sample Location	Date	TPHD ¹ (ug/L) ²	TPHPT ³ (ug/L)	TPHC ⁴ (ug/L)	B ⁵ (ug/L)	T ⁵ (ug/L)	E ⁵ (ug/L)	X ⁵ (ug/L)	Dissolved Iron (ug/L)	Nitrate (mg/L) ⁶	Nitrite (mg/L)	Ammonia Nitrogen (mg/L)	Phosphate (mg/L)	Potassium (ug/L)	Total Organic Carbon (mg/L)	
(cont'd)	1/14/05	140 ^{8,12}	330 ⁹	380 ¹¹	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/1/05	280 ^{8,12}	560 ⁹	620 ¹¹	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-103	3/29/01	910	4,200	5,300	<0.50	<0.50	12	0.6	NA	NA	NA	NA	NA	NA	NA	NA
	1/20/03	440 ⁸	1,300 ⁹	1,300 ¹¹	<0.50	0.53	2.3	<0.50	1,200	1.4	<0.20	<0.20	0.34	<5,000	3.82	3.82
	2/10/03	590 ^{8,12}	1,700 ⁹	1,700 ¹¹	<0.50	<0.50	3.2	<0.50	2,600	1.1	<0.20	<0.20	0.23	<5,000	3.31	3.31
	2/24/03	530 ^{8,12}	1,000 ⁹	960 ¹¹	<0.50	<0.50	3.3	<0.50	2,200	1.3	<0.50	0.3	0.4	<5,000	2.98	2.98
	3/10/03	520 ⁸	1,500 ⁹	1,400 ¹¹	<0.50	<0.50	2.2	<0.50	4,200	0.82	<0.50	0.23	0.27	<5,000	4.29	4.29
	3/24/03	140 ^{8,12}	1,100 ⁹	1,100 ¹¹	<0.50	<0.50	2.3	<0.50	4,400	1.1	<0.50	<0.20	0.12	<5,000	3.37	3.37
	4/7/03	450 ⁸	1,100 ⁹	1,100 ¹⁰	<0.50	<0.50	2.7	<0.50	3,400	0.81	<0.10	<0.20	0.15	<5,000	3.12	3.12
	4/21/03	370 ⁸	710 ⁹	730 ¹⁰	<0.50	<0.50	1.5	<0.50	2,100	0.94	<0.30	<0.20	0.08	<5,000	3.42	3.42
	5/5/03	350 ^{8,12}	1,200 ⁹	1,300 ¹⁰	<0.50	<0.50	1.6	<0.50	2,400	0.77	<0.20	<0.20	0.18	<5,000	3.18	3.18
	7/7/03	1,000 ⁸	4,400 ⁹	5,000 ¹¹	<0.50	0.54	4.8	<0.50	13,000	0.25	<0.10	0.48	0.26	<5,000	5.69	5.69
	10/6/03	760 ⁸	4,000 ⁹	4,000 ¹¹	<1.0	1.1	11	<1.0	31,000	<0.10	<0.20	0.87	0.92	5,900	11.10	11.10
	1/5/04	560 ^{8,12}	1,700 ⁹	1,600 ¹¹	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/5/04	390 ^{8,12}	1,400 ⁹	1,600 ¹¹	<0.50	<0.50	3.5	<0.50	1,500	0.24	<0.10	<0.20	0.41	<5,000	4.70	4.70
	7/7/04	1,100 ⁸	1,900 ⁹	2,200 ¹¹	<0.50	<0.50	2.9	<0.50	13,000	<0.10	<0.10	0.31	0.58	<5,000	8.40	8.40
	10/8/04	1,200 ^{8,12}	4,300 ⁹	4,200 ¹¹	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/14/05	410 ^{8,12}	1,200 ⁹	1,200 ¹¹	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/1/05	840 ^{8,12}	1,300 ⁹	1,300 ¹¹	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-104	3/29/01	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA
	1/20/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	6.7	<0.5	<0.20	0.27	<5,000	6.56	6.56
	2/10/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	6.2	<0.20	<0.20	0.19	<5,000	6.44	6.44
	2/24/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	3.8	<0.50	<0.20	0.23	<5,000	6.60	6.60
	3/10/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	5.2	<0.20	<0.20	0.2	<5,000	5.44	5.44
	3/24/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	4.6	<0.50	<0.20	0.13	<5,000	6.69	6.69
	4/7/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	4.3	<0.10	<0.20	0.17	<5,000	8.22	8.22
	4/21/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	2.0	<0.10	<0.20	0.18	<5,000	7.34	7.34
	5/5/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	2.6	<0.10	<0.20	0.32	<5,000	7.47	7.47
	7/7/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	110	2.5	<0.10	<0.20	0.40	<5,000	3.14	3.14
	10/6/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	340	0.98	<0.10	<0.20	0.13	<5,000	4.21	4.21
MW-104	1/5/04	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
(cont'd)	7/7/04	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	0.54	<0.10	<0.20	0.13	<5,000	2.70	2.70

Table B-2

Historic Groundwater Analytical Results
Pierson Building Center, Eureka, California

Sample Location	Date	TPHD ¹ (ug/L) ²	TPHPT ³ (ug/L)	TPHC ⁴ (ug/L)	B ⁵ (ug/L)	T ⁵ (ug/L)	E ⁵ (ug/L)	X ⁵ (ug/L)	Dissolved Iron (ug/L)	Nitrate (mg/L) ⁶	Nitrite (mg/L)	Ammonia Nitrogen (mg/L)	Phosphate (mg/L)	Potassium (ug/L)	Total Organic Carbon (mg/L)	
MW-105	10/8/04	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/14/05	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/1/05	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/29/01	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA
	1/20/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	4.0	<0.10	<0.20	0.42	<5,000	<5,000	2.97
	2/10/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	2.0	<0.10	<0.20	0.25	<5,000	<5,000	2.87
	2/24/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	3.2	<0.10	<0.20	0.23	<5,000	<5,000	2.81
	3/10/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	1.3	<0.20	<0.20	0.49	<5,000	<5,000	2.67
	3/24/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	2.2	<0.10	<0.20	0.57	<5,000	<5,000	3.04
	4/7/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	3.9	<0.10	<0.20	0.40	<5,000	<5,000	3.25
	4/21/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	3.0	<0.10	<0.20	0.34	<5,000	<5,000	3.24
	5/5/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	6.2	<0.10	<0.20	0.30	<5,000	<5,000	3.70
	7/7/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	130	0.61	<0.10	<0.20	<0.40	<5,000	<5,000	3.14
	10/6/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	0.23	<0.10	<0.20	0.18	<5,000	<5,000	2.79
	1/5/04	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-106	4/5/04	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	0.29	<0.10	<0.20	0.12	<5,000	<5,000	1.90
	7/7/04	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	0.81	<0.10	<0.20	0.10	<5,000	<5,000	1.40
	10/8/04	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/14/05	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/1/05	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/20/03	120 ¹²	<50	<50	<0.50	<0.50	<0.50	<0.50	470	1.0	<0.10	0.99	1.6	9,300	9,300	5.84
	2/10/03	92 ¹²	<50	<50	<0.50	<0.50	<0.50	<0.50	1,400	0.64	<0.20	1.0	1.2	7,900	7,900	6.36
	2/24/03	90 ¹²	<50	<50	<0.50	<0.50	<0.50	<0.50	770	0.95	<0.50	1.4	2.1	7,900	7,900	6.35
	3/10/03	73 ^{8,12}	<50	<50	<0.50	<0.50	<0.50	<0.50	1,500	1.2	<0.10	1.4	1.9	7,600	7,600	6.01
	3/24/03	83 ^{8,12}	<50	<50	<0.50	<0.50	<0.50	<0.50	1,400	1.6	<0.50	0.75	1.1	8,100	8,100	6.47
	4/7/03	110 ¹³	<50	<50	<0.50	<0.50	<0.50	<0.50	1,300	1.4	<0.10	1.2	1.2	7,900	7,900	7.20
	4/21/03	83 ¹³	<50	<50	<0.50	<0.50	<0.50	<0.50	1,300	1.5	<0.10	0.64	0.77	7,400	7,400	6.35
	5/5/03	74 ¹²	<50	<50	<0.50	<0.50	<0.50	<0.50	1,300	1.9	<0.10	0.73	0.95	7,600	7,600	6.55
	7/7/03	63	<50	<50	<0.50	<0.50	<0.50	<0.50	2,200	1.1	<0.10	1.0	1.3	8,300	8,300	5.37
	10/6/03	73 ¹²	<50	<50	<0.50	<0.50	<0.50	<0.50	4,700	0.28	<0.10	2.1	2.2	8,700	8,700	6.34
1/5/04	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4/5/04	56 ¹²	390 ⁹	310 ¹¹	<0.50	<0.50	<0.50	<0.50	390	1.7	<0.10	0.34	0.73	6,600	6,600	4.90	

MW-106 (cont'd)

Table B-2 Historic Groundwater Analytical Results Pierson Building Center, Eureka, California															
Sample Location	Date	TPHD ¹ (ug/L) ²	TPHPT ³ (ug/L)	TPHC ⁴ (ug/L)	B ⁵ (ug/L)	T ⁵ (ug/L)	E ⁵ (ug/L)	X ⁵ (ug/L)	Dissolved Iron (ug/L)	Nitrate (mg/L) ⁶	Nitrite (mg/L)	Ammonia Nitrogen (mg/L)	Phosphate (mg/L)	Potassium (ug/L)	Total Organic Carbon (mg/L)
	7/7/04	79 ¹²	140 ⁹	240 ¹¹	<0.50	<0.50	<0.50	<0.50	2,300	1.1	<0.10	0.99	1.1	6,700	3.90
	10/8/04	<50	56 ⁹	93 ¹¹	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/14/05	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/1/05	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-107	1/20/03	210 ¹²	290 ⁹	400 ¹¹	<0.50	<0.50	<0.50	<0.50	2,300	0.6	<0.50	1.0	1.5	9,200	4.93
	2/10/03	250 ¹²	620 ⁹	740 ¹¹	<0.50	<0.50	<0.50	<0.50	3,200	0.45	<0.50	0.82	0.61	8,800	6.07
	2/24/03	230 ¹²	480 ⁹	550 ¹¹	<0.50	<0.50	<0.50	<0.50	2,200	0.74	<0.50	0.88	1.3	8,300	5.30
	3/10/03	180 ⁸	740 ⁹	780 ¹¹	<0.50	<0.50	0.58	<0.50	2,700	0.44	<0.50	0.99	0.83	8,400	5.28
	3/24/03	240 ^{8,12}	660 ⁹	680 ¹¹	<0.50	<0.50	0.7	<0.50	3,200	0.72	<0.50	0.86	0.66	8,600	5.33
	4/7/03	200 ⁸	430 ⁹	500 ¹⁰	<0.50	<0.50	0.62	<0.50	2,300	0.76	<0.10	0.89	1.0	8,400	5.56
	4/21/03	250 ⁸	660 ⁹	740 ¹⁰	<0.50	<0.50	0.87	<0.50	3,100	0.92	<0.30	0.92	0.69	8,300	5.48
	5/5/03	230 ⁸	560 ⁹	720 ¹⁰	<0.50	<0.50	<0.50	<0.50	2,900	1.5	<0.20	0.79	0.63	8,400	5.24
	7/7/03	65 ¹²	<50	120 ¹¹	<0.50	<0.50	<0.50	<0.50	6,600	3.8	<0.10	1.4	0.49	11,000	6.59
	10/6/03	100 ⁸	140 ⁹	270 ¹¹	<0.50	<0.50	<0.50	<0.50	5,500	0.76	<0.20	1.7	1.5	11,000	7.29
	1/5/04	<50	51 ⁹	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/5/04	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	810	0.51	<0.10	0.22	0.27	6,200	2.80
	7/7/04	110 ⁸	150 ⁹	170 ¹¹	<0.50	<0.50	<0.50	<0.50	2,600	4.3	0.12	0.58	0.96	8,700	2.90
	10/8/04	68 ⁸	140	220 ¹¹	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/14/05	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/1/05	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2A	1/20/03	1,300 ⁸	13,000 ⁹	16,000 ¹⁰	<10	120	750	2,230	12,000	<0.10	<0.50	1.4	1.5	8,200	13.10
	2/10/03	1,400 ^{8,12}	9,900 ⁹	12,000 ¹¹	<10	170	830	2,320	15,000	<0.10	<1.0	1.5	1.2	8,800	4.54
	2/24/03	1,400 ^{8,12}	13,000 ⁹	15,000 ¹¹	<10	150	840	2,320	13,000	<0.10	<0.50	2.3	0.9	8,100	11.20
	3/10/03	1,200 ⁸	16,000 ⁹	17,000 ¹⁰	<10	200	1,000	2,500	15,000	<0.10	<1.0	1.5	1.4	8,300	10.20
	3/24/03	1,200 ^{8,12}	14,000 ⁹	14,000 ¹⁰	<10	230	1,200	3,580	13,000	<0.10	<0.50	1.2	1.2	7,900	11.20
	4/7/03	1,600 ⁸	16,000 ⁹	17,000 ¹⁰	<10	170	990	2,870	13,000	<0.10	<0.50	0.68	0.89	8,000	10.60
	4/21/03	1,300 ⁸	12,000 ⁹	15,000 ¹⁰	<10	<10	1,000	2,660	14,000	<0.10	<0.50	1.3	1.1	7,300	13.30
	5/5/03	1,300 ^{8,12}	14,000 ⁹	17,000 ¹⁰	<5.0	160	770	2,010	12,000	<0.10	<0.50	0.82	0.64	7,500	10.10
MW-2A (cont'd)	7/7/03	1,200 ^{8,12}	17,000 ⁹	22,000 ¹⁰	<10	200	1,100	2,940	11,000	<0.10	<0.10	1.0	1.7	7,400	8.57
	10/6/03	1,200 ⁸	13,000 ⁹	19,000 ¹⁰	<5.0	150	780	1,620	17,000	<0.10	<0.20	1.8	1.5	8,600	8.46
	1/5/04	1,500 ^{8,12}	19,000 ⁹	22,000 ¹⁰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table B-2

**Historic Groundwater Analytical Results
Pierson Building Center, Eureka, California**

Sample Location	Date	TPHD ¹ (ug/L) ²	TPHPT ³ (ug/L)	TPHG ⁴ (ug/L)	B ⁵ (ug/L)	T ⁵ (ug/L)	E ⁵ (ug/L)	X ⁵ (ug/L)	Dissolved Iron (ug/L)	Nitrate (mg/L) ⁶	Nitrite (mg/L)	Ammonia Nitrogen (mg/L)	Phosphate (mg/L)	Potassium (ug/L)	Total Organic Carbon (mg/L)
MW-3	4/5/04	1,600 ^{8,12}	35,000 ⁹	36,000 ¹⁰	<15	120	1,600	4,860	2,800	<0.10	<0.10	0.20	1.0	<5,000	5.30
	1/20/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	340	6.4	<0.20	<0.20	0.12	8,200	4.16
	2/10/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	370	6.4	<0.20	0.30	0.094	8,700	4.54
	2/24/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	210	7.2	<0.30	0.22	0.073	8,400	3.81
	3/10/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	430	6.7	<0.20	0.33	0.11	7,900	3.72
	3/24/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	220	7.5	<0.20	0.27	0.029	8,200	3.75
	4/7/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	300	6.3	<0.10	0.38	0.043	8,700	4.01
	4/21/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	170	7.5	<0.10	0.28	0.044	8,500	3.83
	5/5/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	200	6.6	<0.10	0.23	0.066	8,000	3.40
	7/7/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	220	6.9	<0.10	0.66	0.12	10,000	3.94
	10/6/03	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	250	6.2	<0.10	0.39	0.13	11,000	4.50
	1/5/04	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/5/04	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<100	0.75	<0.10	0.29	0.078	6,900	2.70

1. Total Petroleum Hydrocarbons as Diesel (TPHD) analyzed in general accordance with EPA Method No. 3550.

2. ug/L: micrograms per liter

3. Total Petroleum Hydrocarbons as Paint Thinner (TPHPT) analyzed in general accordance with EPA Method No. 5030.

4. Total Petroleum Hydrocarbons as Gasoline (TPHG) analyzed in general accordance with EPA Method No. 5030.

5. Benzene (B), Toluene (T), Ethylbenzene (E), Xylenes (X), Volatile Organic Compounds (VOCs), analyzed in general accordance with EPA Method No. 8260B.

6. milligrams per liter (mg/L)

7. <: denotes a value that is "less than" the method detection limit.

8. Contains some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights.

9. Does not present a peak pattern consistent with that of paint thinner. The reported results represent the amount of material in the paint thinner range.

10. Appears to be similar to gasoline but certain peak ratios are not that of a fresh gasoline standard. The reported results represent the amount of material in the gasoline range.

11. Does not present a peak pattern consistent with that of gasoline. The reported results represent the amount of material in the gasoline range.

12. Contains material in the diesel range of molecular weights, but the material does not exhibit the peak pattern typical of diesel oil.

13. Contains material similar to degraded or weathered diesel oil.

Table B-3

**Analytical Results for Volatile Organics¹ in Groundwater
Pierson Building Center, Eureka, California**

(units = ug/L)²

Sample Location	Date	MTBE ³	Chloroform	Isopropyl-benzene	Bromo-benzene	n-Propyl-benzene	1,3,5-Trimethyl-benzene	1,2,4-Trimethyl-benzene	sec-Butyl-benzene	n-Butyl-benzene	Naphthalene
MW-101	01/20/03	NA ⁴	<1.0 ⁵	12	21	<1.0	7.0	62	2.1	<1.0	2.4
	02/10/03	NA	<5.0	24	<5.0	51	32	170	6.1	<5.0	<20
	02/24/03	NA	<5.0	18	<5.0	40	24	130	5.1	<5.0	<20
	03/10/03	NA	<2.0	28	<2.0	62	64	300	7.7	4.5	46
	03/24/03	NA	<2.0	24	<2.0	56	53	250	<2.0	<2.0	45
	04/07/03	NA	<2.0	22	<2.0	50	42	190	6.1	21	30
	04/21/03	NA	<1.0	18	<1.0	36	31	120	4.7	2.1	33
	05/05/03	NA	<2.0	21	<2.0	37	27	130	3.0	4.0	24
	07/07/03	<2.0	<4.0	48	<4.0	110	110	470	15	7.1	65
	10/06/03	<0.50	<1.0	34	<1.0	75	26	57	15	8.7	35
	01/05/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/05/04	<1.0	2.9	30	<2.0	88	160	120	13	16	51
	07/07/04	<1.0	<2.0	27	<2.0	110	94	240	23	21	15
	MW-102	01/20/03	NA	19	7.9	<1.0	22	1.6	1.0	6.4	3.2
02/10/03		NA	14	2.1	<1.0	7.2	<1.0	<1.0	2.5	<1.0	<2.0
02/24/03		NA	12	7	<1.0	25	<1.0	<1.0	11	1.9	<2.0
03/10/03		NA	8.1	3.6	<1.0	15	<1.0	<1.0	6.2	1.5	<2.0
03/24/03		NA	11	4.2	<1.0	18	<1.0	<1.0	7.3	1.6	<2.0
04/07/03		NA	13	4.3	<1.0	17	<1.0	<1.0	7.0	2.4	<2.0
04/21/03		NA	12	3.1	<1.0	13	<1.0	<1.0	5.4	<1.0	<2.0
05/05/03		NA	17	5.4	<1.0	19	<1.0	<1.0	7.7	2.7	<2.0
07/07/03		<0.50	1.6	3.8	<1.0	17	<1.0	<1.0	8.9	1.9	<2.0
10/06/03		<0.50	<1.0	5.8	<1.0	22	<1.0	<1.0	14	2.8	<2.0
01/05/04		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
04/05/04		<0.50	<1.0	5.6	<1.0	14	1.2	1.4	8.0	2.2	<2.0
07/07/04		<0.50	<1.0	5.3	<1.0	19	<1.0	<1.0	11	3.3	2.4
MW-103		01/20/03	NA	<1.0	32	<1.0	70	<1.0	<1.0	21	11
	02/10/03	NA	<1.0	36	<1.0	91	<1.0	<1.0	21	11	6.3
	02/24/03	NA	<1.0	38	<1.0	89	<1.0	<1.0	20	8.4	9.0
	03/10/03	NA	<1.0	23	<1.0	56	<1.0	<1.0	12	5.4	8.7

Table B-3

**Analytical Results for Volatile Organics¹ in Groundwater
Pierson Building Center, Eureka, California**

(units = ug/L)²

Sample Location	Date	MTBE ³	Chloroform	Isopropyl-benzene	Bromo-benzene	n-Propyl-benzene	1,3,5-Trimethyl-benzene	1,2,4-Trimethyl-benzene	sec-Butyl-benzene	n-Butyl-benzene	Naphthalene
MW-103 cont'd	03/24/03	NA	<1.0	24	<1.0	62	<1.0	<1.0	13	5.6	8.9
	04/07/03	NA	<1.0	30	<1.0	81	<1.0	<1.0	17	9.7	5.2
	04/21/03	NA	<1.0	16	<1.0	46	<1.0	<1.0	9.7	3.3	5.7
	05/05/03	NA	<1.0	29	<1.0	59	<1.0	<1.0	12	6.4	4.3
	07/07/03	<0.50	<1.0	58	<1.0	160	<1.0	<1.0	30	15	28
	10/06/03	<1.0	<2.0	140	<2.0	310	<2.0	<2.0	82	47	24
	01/05/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/05/04	<0.50	<1.0	33	<1.0	75	<1.0	<1.0	19	9.4	13
	07/07/04	<0.50	<1.0	56	<1.0	<1.0	<1.0	<1.0	30	19	16
	01/20/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
MW-104	02/10/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
	02/24/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
	03/10/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
	03/24/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
	04/07/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
	04/21/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
	05/05/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
	07/07/03	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
	10/06/03	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
	01/05/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/05/04	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
	07/07/04	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
	01/20/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
	02/10/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
	02/24/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
03/10/03	NA	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
03/24/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
04/07/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
04/21/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
05/05/03	NA	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	

Table B-3

**Analytical Results for Volatile Organics¹ in Groundwater
Pierson Building Center, Eureka, California**

(units = ug/L)²

Sample Location	Date	MTBE ³	Chloroform	Isopropyl-benzene	Bromo-benzene	n-Propyl-benzene	1,3,5-Trimethyl-benzene	1,2,4-Trimethyl-benzene	sec-Butyl-benzene	n-Butyl-benzene	Naphthalene	
MW-105 cont'd	07/07/03	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
	10/06/03	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
	01/05/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	04/05/04	<0.50	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
	07/07/04	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
MW-106	01/20/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
	02/10/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
	02/24/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
	03/10/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
	03/24/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
	04/07/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
	04/21/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
	05/05/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
	07/07/03	1.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
	10/06/03	3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
	01/05/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	04/05/04	<0.50	<1.0	19	<1.0	15	<1.0	<1.0	14	<1.0	<2.0	
	07/07/04	<0.50	<1.0	2.8	<1.0	<1.0	<1.0	<1.0	8.0	<1.0	<2.0	
	MW-107	01/20/03	NA	<1.0	14	<1.0	7.4	<1.0	<1.0	5.6	1.7	<2.0
		02/10/03	NA	<1.0	20	<1.0	20	<1.0	<1.0	<1.0	3.1	<2.0
02/24/03		NA	<1.0	21	<1.0	26	<1.0	<1.0	<1.0	3.3	<2.0	
03/10/03		NA	<1.0	23	<1.0	39	<1.0	<1.0	12	4.2	<2.0	
03/24/03		NA	<1.0	27	<1.0	45	<1.0	<1.0	14	5.2	<2.0	
04/07/03		NA	<1.0	21	<1.0	34	<1.0	<1.0	11	4.3	<2.0	
04/21/03		NA	<1.0	34	<1.0	62	<1.0	<1.0	17	5.9	<2.0	
05/05/03		NA	<1.0	29	<1.0	46	<1.0	<1.0	13	5.6	<2.0	
07/07/03		1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<2.0	
10/06/03		1.4	<1.0	6.9	<1.0	1.7	<1.0	<1.0	5.9	<1.0	<2.0	
01/05/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

Table B-3

Analytical Results for Volatile Organics¹ in Groundwater
Pierson Building Center, Eureka, California

(units = ug/L)²

Sample Location	Date	MTBE ³	Chloroform	Isopropyl-benzene	Bromo-benzene	n-Propyl-benzene	1,3,5-Trimethyl-benzene	1,2,4-Trimethyl-benzene	sec-Butyl-benzene	n-Butyl-benzene	Naphthalene	
MW-107 cont'd	04/05/04	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
	07/07/04	<0.50	<1.0	13	<1.0	17	<1.0	<1.0	6.1	1.1	<2.0	
MW-2A	01/20/03	NA	<20 ³	50	<20	140	140	700	<20	<20	210	
	02/10/03	NA	<20	57	<20	150	140	730	<20	<20	210	
	02/24/03	NA	<20	51	<20	150	140	830	<20	<20	210	
	03/10/03	NA	<20	57	<20	170	150	880	<20	27	280	
	03/24/03	NA	<20	63	<20	220	190	1100	20	36	350	
	04/07/03	NA	<20	60	<20	170	140	830	<20	76	230	
	04/21/03	NA	<20	46	<20	140	120	710	<20	<20	250	
	05/05/03	NA	<10	63	<10	180	120	710	15	27	210	
	07/07/03	<10	<20	88	<20	200	160	930	27	<20	340	
	10/06/03	<5.0	<10	86	<10	250	110	690	27	31	310	
	01/05/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	04/05/04	<15	<30	140	<30	390	550	2,100	40	<30	580	
	MW-3	01/20/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<2.0
		02/10/03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
02/24/03		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
03/10/03		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
03/24/03		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
04/07/03		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
04/21/03		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
05/05/03		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
07/07/03		2.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
10/06/03		6.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
01/05/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
04/05/04	0.86	<1.0	4.5	<1.0	<1.0	<1.0	1.6	<1.0	<1.0	<2.0		

1. Volatile Organics by GC/MS EPA Method SW8260B

2. ug/L: micrograms per Liter

3. MTBE: Methyl Tertiary-Butyl Ether

4. NA: Not Analyzed

5. <: denotes a value that is "less than" the method detection limit.

Table B-4
Microbiological Plate Counts
Pierson Building Center, Eureka, California

Sample Location	Sample Date	Heterotrophic (1.00x10⁵)	Selective (1.00x10⁵)	% Degraders
MW-101	1/20/03	4.1	0.6	14.63
	2/10/03	5.7	1.9	33.33
	2/24/03	5.4	2.3	42.59
	3/10/03	4.9	1.5	30.61
	3/24/03	5.1	1.8	35.29
	4/7/03	5.7	1.6	28.07
	4/21/03	6.5	2.1	32.31
	5/5/03	6.4	2.5	39.06
	7/7/03	7.2	2.1	29.17
	10/6/03	5.9	1.1	18.64
	1/5/04	5.2	0.8	15.38
	4/5/04	4.8	0.4	8.33
	7/7/04	5.2	0.6	11.54
MW-102	1/20/03	4.8	0.9	18.78
	2/10/03	8.2	1.4	22.58
	2/24/03	6.5	1.2	18.46
	3/10/03	5.4	0.9	16.67
	3/24/03	5.7	1.4	24.56
	4/7/03	6.4	1.2	18.75
	4/21/03	6.2	1.6	25.81
	5/5/03	6.7	2.2	32.84
	7/7/03	5.6	1.8	32.14
	10/6/03	5.3	1.4	26.42
	1/5/04	5.5	0.9	16.36
	4/5/04	5.1	0.4	7.84
	7/7/04	7.2	1.1	15.28
	10/8/04	8.4	1.7	20.24
	1/14/05	9.1	2.1	23.08
MW-103	1/20/03	5.2	0.5	9.62
	2/10/03	7.1	1.5	21.13
	2/24/03	6.5	2.1	32.31
	3/10/03	5.0	2.3	46.00
	3/24/03	5.3	1.8	33.96
	4/7/03	5.7	1.9	33.33
	4/21/03	6.4	2.2	34.38
	5/5/03	6.1	1.7	27.87
	7/7/03	5.8	0.9	15.52
	10/6/03	5.1	0.6	11.76
	1/5/04	4.7	0.4	8.51
	4/5/04	4.1	0.3	7.32

Table B-4 Microbiological Plate Counts Pierson Building Center, Eureka, California				
Sample Location	Sample Date	Heterotrophic (1.00x10 ⁵)	Selective (1.00x10 ⁵)	% Degraders
MW-103 (cont'd)	7/7/04	6.6	2.1	31.82
	10/8/04	6.2	2.9	46.77
	1/14/05	7.2	3.5	48.61
MW-104	1/20/03	4.9	0.7	14.29
	2/10/03	5.1	1.1	21.57
	2/24/03	4.7	1.4	29.79
	3/10/03	5.5	1.1	20.00
	3/24/03	6.1	0.8	13.11
	4/7/03	5.8	0.7	12.07
	4/21/03	6.8	1.0	14.71
	5/5/03	6.5	1.3	20.00
	7/7/03	5.4	0.9	16.87
	10/6/03	4.9	0.5	10.20
	1/5/04	5.1	ND ¹	0
	4/5/04	5.3	ND	0
	7/7/04	6.0	1.1	18.33
	MW-105	1/20/03	5.6	1.2
2/10/03		5.3	1.5	28.30
2/24/03		5.0	1.1	22.00
3/10/03		6.1	0.8	13.11
3/24/03		6.1	0.6	9.84
4/7/03		6.4	0.8	12.50
4/21/03		6.6	1.2	18.18
5/5/03		6.3	1.5	23.81
7/7/03		5.1	0.8	15.69
10/6/03		5.3	0.5	9.43
1/5/04		5.1	0.7	13.73
4/5/04		4.9	0.5	10.20
7/7/04		8.1	3.4	41.98
MW-106		1/20/03	5.1	0.2
	2/10/03	8.1	3.2	39.51
	2/24/03	7.5	2.4	32.00
	3/10/03	6.3	2.2	34.92
	3/24/03	5.9	1.9	32.20
	4/7/03	5.6	1.7	30.36
	4/21/03	6.2	2.1	33.87
	5/5/03	6.3	1.7	26.98
	7/7/03	5.6	1.1	19.64
	10/6/03	5.7	0.9	15.79
	1/5/04	5.3	ND	0

Table B-4 Microbiological Plate Counts Pierson Building Center, Eureka, California				
Sample Location	Sample Date	Heterotrophic (1.00x10 ⁵)	Selective (1.00x10 ⁵)	% Degraders
MW-106 (cont'd)	4/5/04	5.1	ND	0
	7/7/04	5.4	0.4	7.41
MW-107	1/20/03	6.3	0.3	4.76
	2/10/03	5.8	0.6	10.34
	2/24/03	6.3	0.8	12.70
	3/10/03	5.8	1.1	18.97
	3/24/03	5.4	1.5	27.78
	4/7/03	5.5	1.8	32.73
	4/21/03	5.7	1.4	24.56
	5/5/03	5.9	1.6	27.12
	7/7/03	5.1	1.4	27.45
	10/6/03	5.3	0.6	11.32
	1/5/04	5.7	0.1	1.75
	4/5/04	5.2	ND	0
	7/7/04	5.2	ND	0
MW-2A	1/20/03	5.3	0.9	16.98
	2/10/03	7.2	2.7	37.50
	2/24/03	7.9	2.1	26.58
	3/10/03	6.2	2.8	45.16
	3/24/03	6.5	3.1	47.69
	4/7/03	6.0	2.7	45.00
	4/21/03	6.7	3.4	50.75
	5/5/03	7.1	3.2	45.07
	7/7/03	6.6	2.9	43.94
	10/6/03	6.0	1.9	31.67
	1/5/04	5.4	1.2	22.22
	4/5/04	6.1	1.4	22.95
	MW-3	1/20/03	5.4	0.3
2/10/03		5.8	0.9	15.52
2/24/03		4.9	1.5	30.61
3/10/03		5.6	1.2	20.69
3/24/03		6.1	0.8	13.11
4/7/03		6.6	0.5	7.58
4/21/03		6.9	0.6	8.70
5/5/03		6.7	1.1	16.42
7/7/03		6.2	1.2	19.35
10/6/03		5.6	0.8	14.29
1/5/04		5.8	0.5	8.62
4/5/04		5.4	0.7	12.96

1. ND: Not Detected

Table B-5
Historic Natural Attenuation Parameters
Pierson Building Center, Eureka, California

Sample Location	Date Measured	DCO ₂ ¹ (ppm) ²	DO ¹ (ppm)	ORP ¹ (mV) ³	pH ¹
MW-101	1/20/03	50	1.60	212	6.40
	2/10/03	40	0.98	229	6.17
	2/24/03	70	1.70	275	6.25
	3/10/03	35	1.45	281	6.35
	3/24/03	55	1.33	245	6.24
	4/7/03	80	1.21	242	6.22
	4/21/03	45	2.17	151	6.17
	5/5/03	100	0.94	257	6.17
	7/7/03	70	0.62	246	6.28
	10/6/03	25	1.89	249	6.59
	1/5/04	30	2.58	263	6.19
	4/5/04	20	0.75	272	6.08
	7/7/04	45	0.52	9	5.81
	10/8/04	35	0.74	-37	6.62
	1/14/05	25	0.91	72	6.31
4/1/05	30	1.24	82	6.46	
MW-102	1/20/03	65	1.04	245	5.85
	2/10/03	70	0.59	243	5.97
	2/24/03	65	0.49	240	6.11
	3/10/03	70	0.79	252	6.14
	3/24/03	60	0.90	268	5.97
	4/7/03	80	0.88	252	5.90
	4/21/03	60	0.69	190	5.86
	5/5/03	65	0.77	256	5.87
	7/7/03	70	0.60	247	6.17
	10/6/03	45	0.46	249	6.20
	1/5/04	NM ⁴	3.21	281	5.78
	4/5/04	50	1.20	289	5.84
	7/7/04	50	0.52	0	6.61
	10/8/04	50	0.72	-14	6.41
	1/14/05	40	1.08	91	6.05
4/1/05	60	0.66	126	6.07	
MW-103	1/20/03	40	1.88	230	5.93
	2/10/03	40	0.70	234	5.85
	2/24/03	55	0.87	239	6.11
	3/10/03	50	1.06	266	6.11
	3/24/03	45	1.66	258	6.06
	4/7/03	50	1.97	258	5.93
	4/21/03	40	1.39	82	5.72
	5/5/03	50	2.22	256	5.86
	7/7/03	80	0.47	243	5.97
	10/6/03	170	0.57	251	6.06
	1/5/04	40	2.50	275	5.72
	4/5/04	95	1.26	289	6.03
	7/7/04	NM	0.85	9	6.28

**Table B-5
Historic Natural Attenuation Parameters
Pierson Building Center, Eureka, California**

Sample Location	Date Measured	DCO₂¹ (ppm)²	DO¹ (ppm)	ORP¹ (mV)³	pH¹
MW-103 (cont'd)	10/8/04	65	0.70	-5	6.29
	1/14/05	50	0.98	103	6.13
	4/1/05	35	1.42	144	6.13
MW-104	1/20/03	90	1.99	188	6.14
	2/10/03	25	3.49	231	5.87
	2/24/03	50	2.21	199	6.22
	3/10/03	40	2.37	252	6.27
	3/24/03	40	2.23	249	6.21
	4/7/03	60	3.24	238	6.08
	4/21/03	30	1.70	246	6.03
	5/5/03	55	1.25	247	6.07
	7/7/03	40	1.60	229	6.23
	10/6/03	40	1.56	248	5.79
	1/5/04	30	3.00	275	5.76
	4/5/04	20	0.89	271	5.91
	7/7/04	40	1.99	101	6.34
	10/8/04	60	1.56	78	6.10
	1/14/05	45	1.73	74	6.11
4/1/05	40	1.50	134	6.17	
MW-105	1/20/03	20	4.96	230	6.50
	2/10/03	15	2.87	239	6.54
	2/24/03	25	4.30	258	6.33
	3/10/03	40	2.03	252	6.29
	3/24/03	25	3.25	253	6.26
	4/7/03	35	4.27	241	6.22
	4/21/03	20	2.94	193	6.14
	5/5/03	45	4.04	244	6.19
	7/7/03	70	1.77	241	5.89
	10/6/03	45	2.44	252	6.06
	1/5/04	25	3.38	268	6.18
	4/5/04	20	1.48	281	6.09
	7/7/04	45	1.43	100	5.14
	10/8/04	30	1.28	72	6.44
	1/14/05	15	5.02	65	6.34
4/1/05	20	2.87	122	6.30	
MW-106	1/20/03	70	0.87	218	6.53
	2/10/03	70	1.96	232	6.48
	2/24/03	90	1.16	181	6.48
	3/10/03	85	1.03	227	6.54
	3/24/03	65	0.81	234	6.36
	4/7/03	100	1.00	239	6.31
	4/21/03	50	0.80	221	6.33
	5/5/03	95	1.44	199	6.36
	7/7/03	100	0.55	210	6.26
	10/6/03	90	0.58	268	6.46
	1/5/04	125	2.63	266	6.00
	4/5/04	50	3.08	274	6.02

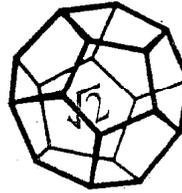
**Table B-5
Historic Natural Attenuation Parameters
Pierson Building Center, Eureka, California**

Sample Location	Date Measured	DCO ₂ ¹ (ppm) ²	DO ¹ (ppm)	ORP ¹ (mV) ³	pH ¹
MW-106 (cont'd)	7/7/04	100	0.66	126	5.41
	10/8/04	80	1.09	101	6.49
	1/14/05	40	1.65	114	6.49
	4/1/05	55	0.73	116	6.48
MW-107	1/20/03	70	0.95	256	6.41
	2/10/03	85	1.08	237	6.38
	2/24/03	100	0.49	251	6.46
	3/10/03	90	0.52	248	6.40
	3/24/03	80	0.41	244	6.32
	4/7/03	120	0.37	242	6.28
	4/21/03	65	0.33	245	6.34
	5/5/03	160	0.37	239	6.26
	7/7/03	130	0.49	224	6.05
	10/6/03	115	0.58	251	6.28
	1/5/04	70	0.69	270	6.03
	4/5/04	30	0.56	283	5.90
	7/7/04	135	0.56	100	5.27
	10/8/04	100	0.91	81	6.43
	1/14/05	40	0.99	111	6.21
4/1/05	60	0.78	96	6.24	
MW-2A	1/20/03	75	0.28	238	6.42
	2/10/03	90	0.32	235	6.32
	2/24/03	130	0.37	288	6.24
	3/10/03	100	0.40	244	6.31
	3/24/03	80	0.33	246	6.29
	4/7/03	75	0.32	257	6.14
	4/21/03	75	0.23	222	6.20
	5/5/03	140	0.28	235	6.22
	7/7/03	95	0.33	249	6.24
	10/6/03	95	0.39	249	6.35
	1/5/04	75	0.69	275	6.19
4/5/04	40	0.56	274	6.07	
MW-3	1/20/03	60	2.62	238	6.64
	2/10/03	35	3.38	233	6.57
	2/24/03	45	3.81	239	6.67
	3/10/03	50	2.89	235	6.68
	3/24/03	35	3.40	239	6.60
	4/7/03	80	2.84	250	6.47
	4/21/03	40	3.41	215	6.53
	5/5/03	45	3.34	244	6.41
	7/7/03	60	1.79	244	8.87
	10/6/03	40	0.65	242	6.48
	1/5/04	40	4.02	273	6.30
	4/5/04	30	2.80	270	6.45

1. DCO₂ (Dissolved Carbon Dioxide), DO (Dissolved Oxygen), ORP (Oxidation-Reduction Potential), and pH measured with portable equipment.
2. ppm: parts per million
3. mV: millivolts
4. NM: Not Measured

Appendix C

Laboratory Analytical Reports



**NORTH COAST
LABORATORIES LTD.**

April 15, 2005

Pierson Building Center
4100 Broadway
Eureka, CA 95501

Order No.: 0504027

Invoice No.: 49399

PO No.:

ELAP No. 1247-Expires July 2006

Attn: Morgan Randall

RE: 091148.100, Pierson's Building Center

SAMPLE IDENTIFICATION

Fraction Client Sample Description

01A	MW-106
01D	MW-106
01G	MW-106
02A	MW-107
02D	MW-107
02G	MW-107
03A	MW-104
03D	MW-104
03G	MW-104
04A	MW-103
04D	MW-103
04G	MW-103
05A	MW-105
05D	MW-105
05G	MW-105
06A	MW-102
06D	MW-102
06G	MW-102
07A	MW-101
07D	MW-101
07G	MW-101

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s)

QA Unit

Jesse G. Chaney, Jr.
Laboratory Director

CLIENT: Pierson Building Center
Project: 091148.100, Pierson's Building Center
Lab Order: 0504027

CASE NARRATIVE

TPH as Diesel:

Samples MW-103, MW-102 and MW-101 contain some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights. These samples also contain material in the diesel range of molecular weights, but the material does not exhibit the peak pattern typical of diesel oil.

The surrogate recoveries were above the upper acceptance limit for sample MW-107, the method blank and the laboratory control sample duplicate (LCSD). The laboratory control sample (LCS)/LCSD recoveries were within the acceptance limits for diesel; therefore, the data were accepted.

TPH as Paint Thinner:

Samples MW-103, MW-102 and MW-101 do not present a peak pattern consistent with that of paint thinner. The reported results represent the amount of material in the paint thinner range.

TPH as Gasoline:

Samples MW-103, MW-102 and MW-101 do not present a peak pattern consistent with that of gasoline. The reported results represent the amount of material in the gasoline range.

Date: 15-Apr-05
WorkOrder: 0504027

ANALYTICAL REPORT

Client Sample ID: MW-106
Lab ID: 0504027-01A

Received: 4/1/05 Collected: 4/1/05 10:35

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/13/05

Client Sample ID: MW-106
Lab ID: 0504027-01D

Received: 4/1/05 Collected: 4/1/05 10:35

Test Name: TPH as Paint Thinner

Reference: EPA 5030/GCFID(LUFT)

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPH-Paint thinner	ND	50	µg/L	1.0		4/13/05

Client Sample ID: MW-106
Lab ID: 0504027-01G

Received: 4/1/05 Collected: 4/1/05 10:35

Test Name: TPH as Diesel

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	4/12/05	4/13/05
Surrogate: N-Tricosane	129	70-130	% Rec	1.0	4/12/05	4/13/05

Client Sample ID: MW-107
Lab ID: 0504027-02A

Received: 4/1/05 Collected: 4/1/05 11:20

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/13/05

Client Sample ID: MW-107
Lab ID: 0504027-02D

Received: 4/1/05 Collected: 4/1/05 11:20

Test Name: TPH as Paint Thinner

Reference: EPA 5030/GCFID(LUFT)

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPH-Paint thinner	ND	50	µg/L	1.0		4/13/05

Date: 15-Apr-05
WorkOrder: 0504027

ANALYTICAL REPORT

Client Sample ID: MW-107
Lab ID: 0504027-02G

Received: 4/1/05

Collected: 4/1/05 11:20

Test Name: TPH as Diesel

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	4/12/05	4/13/05
Surrogate: N-Tricosane	145	70-130	% Rec	1.0	4/12/05	4/13/05

Client Sample ID: MW-104
Lab ID: 0504027-03A

Received: 4/1/05

Collected: 4/1/05 12:45

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/13/05

Client Sample ID: MW-104
Lab ID: 0504027-03D

Received: 4/1/05

Collected: 4/1/05 12:45

Test Name: TPH as Paint Thinner

Reference: EPA 5030/GCFID(LUFT)

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPH-Paint thinner	ND	50	µg/L	1.0		4/13/05

Client Sample ID: MW-104
Lab ID: 0504027-03G

Received: 4/1/05

Collected: 4/1/05 12:45

Test Name: TPH as Diesel

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	4/12/05	4/13/05
Surrogate: N-Tricosane	124	70-130	% Rec	1.0	4/12/05	4/13/05

Client Sample ID: MW-103
Lab ID: 0504027-04A

Received: 4/1/05

Collected: 4/1/05 13:25

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	1,300	250	µg/L	5.0		4/13/05

Date: 15-Apr-05
WorkOrder: 0504027

ANALYTICAL REPORT

Client Sample ID: MW-103
Lab ID: 0504027-04D

Received: 4/1/05

Collected: 4/1/05 13:25

Test Name: TPH as Paint Thinner

Reference: EPA 5030/GCFID(LUFT)

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPH-Paint thinner	1,300	250	µg/L	5.0		4/13/05

Client Sample ID: MW-103
Lab ID: 0504027-04G

Received: 4/1/05

Collected: 4/1/05 13:25

Test Name: TPH as Diesel

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	840	50	µg/L	1.0	4/12/05	4/13/05
Surrogate: N-Tricosane	129	70-130	% Rec	1.0	4/12/05	4/13/05

Client Sample ID: MW-105
Lab ID: 0504027-05A

Received: 4/1/05

Collected: 4/1/05 12:10

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/13/05

Client Sample ID: MW-105
Lab ID: 0504027-05D

Received: 4/1/05

Collected: 4/1/05 12:10

Test Name: TPH as Paint Thinner

Reference: EPA 5030/GCFID(LUFT)

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPH-Paint thinner	ND	50	µg/L	1.0		4/13/05

Client Sample ID: MW-105
Lab ID: 0504027-05G

Received: 4/1/05

Collected: 4/1/05 12:10

Test Name: TPH as Diesel

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	4/12/05	4/13/05
Surrogate: N-Tricosane	125	70-130	% Rec	1.0	4/12/05	4/13/05

Date: 15-Apr-05
WorkOrder: 0504027

ANALYTICAL REPORT

Client Sample ID: MW-102
Lab ID: 0504027-06A

Received: 4/1/05

Collected: 4/1/05 14:05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	620	50	µg/L	1.0		4/13/05

Client Sample ID: MW-102
Lab ID: 0504027-06D

Received: 4/1/05

Collected: 4/1/05 14:05

Test Name: TPH as Paint Thinner

Reference: EPA 5030/GCFID(LUFT)

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPH-Paint thinner	560	50	µg/L	1.0		4/13/05

Client Sample ID: MW-102
Lab ID: 0504027-06G

Received: 4/1/05

Collected: 4/1/05 14:05

Test Name: TPH as Diesel

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	280	50	µg/L	1.0	4/12/05	4/13/05
Surrogate: N-Tricosane	127	70-130	% Rec	1.0	4/12/05	4/13/05

Client Sample ID: MW-101
Lab ID: 0504027-07A

Received: 4/1/05

Collected: 4/1/05 14:40

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	1,900	250	µg/L	5.0		4/13/05

Client Sample ID: MW-101
Lab ID: 0504027-07D

Received: 4/1/05

Collected: 4/1/05 14:40

Test Name: TPH as Paint Thinner

Reference: EPA 5030/GCFID(LUFT)

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPH-Paint thinner	1,200	250	µg/L	5.0		4/13/05

Date: 15-Apr-05
WorkOrder: 0504027

ANALYTICAL REPORT

Client Sample ID: MW-101
Lab ID: 0504027-07G

Received: 4/1/05

Collected: 4/1/05 14:40

Test Name: TPH as Diesel

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	380	50	µg/L	1.0	4/12/05	4/13/05
Surrogate: N-Tricosane	130	70-130	% Rec	1.0	4/12/05	4/13/05

North Coast Laboratories, Ltd.

Date: 15-Apr-05

CLIENT: Pierson Building Center
Work Order: 0504027
Project: 091148.100, Pierson's Building Center

QC SUMMARY REPORT
 Method Blank

Sample ID: MB-4/13/05 Batch ID: R34364 Test Code: TPHCGW Units: µg/L Analysis Date: 4/13/05 7:22:19 PM Prep Date:
 Client ID: Run ID: ORGC8_050413A SeqNo: 498162
 Analyte Result Limit SPK value SPK Ref Val % Rec LowLimit HighLimit RPD RefVal %RPD RPDLimit Qual

TPHC Gas (C6-C14) ND 50

Sample ID: MB-13316 Batch ID: 13316 Test Code: TPHDIW Units: µg/L Analysis Date: 4/12/05 7:41:39 PM Prep Date: 4/12/05
 Client ID: Run ID: ORGC7_050412A SeqNo: 497836
 Analyte Result Limit SPK value SPK Ref Val % Rec LowLimit HighLimit RPD RefVal %RPD RPDLimit Qual

TPHC Diesel (C12-C22) ND 50
 N-Tricosane 67.6 0.10 50.0 0 135% 70 130 0 S

Sample ID: MB-4/13/05 Batch ID: R34365 Test Code: TPHPTW Units: µg/L Analysis Date: 4/13/05 7:22:19 PM Prep Date:
 Client ID: Run ID: ORGC8_050413B SeqNo: 498174
 Analyte Result Limit SPK value SPK Ref Val % Rec LowLimit HighLimit RPD RefVal %RPD RPDLimit Qual

TPH-Paint thinner ND 50

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

North Coast Laboratories, Ltd.

Date: 15-Apr-05

CLIENT: Pierson Building Center
Work Order: 0504027
Project: 091148.100, Pierson's Building Center

QC SUMMARY REPORT
 Laboratory Control Spike

Sample ID: LCS-05256 Batch ID: R34364 Test Code: TPHCGW Units: µg/L Analysis Date: 4/13/05 5:38:47 PM Prep Date:
 Client ID: Run ID: ORGC8_050413A SeqNo: 498160

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	552.7	50	500	0	111%	81	126	0			

Sample ID: LCSD-05256 Batch ID: R34364 Test Code: TPHCGW Units: µg/L Analysis Date: 4/13/05 6:13:24 PM Prep Date:
 Client ID: Run ID: ORGC8_050413A SeqNo: 498161

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	542.8	50	500	0	109%	81	126	553	1.80%	15	

Sample ID: LCS-13316 Batch ID: 13316 Test Code: TPHDIW Units: µg/L Analysis Date: 4/12/05 6:07:54 PM Prep Date: 4/12/05
 Client ID: Run ID: ORGC7_050412A SeqNo: 497833

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	408.2	50	500	0	81.6%	67	120	0			
N-Tricosane	63.6	0.10	50.0	0	127%	70	130	0			

Sample ID: LCSD-13316 Batch ID: 13316 Test Code: TPHDIW Units: µg/L Analysis Date: 4/12/05 6:26:29 PM Prep Date: 4/12/05
 Client ID: Run ID: ORGC7_050412A SeqNo: 497834

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	407.8	50	500	0	81.6%	67	120	408	0.109%	15	
N-Tricosane	67.7	0.10	50.0	0	135%	70	130	63.6	6.19%	15	S

Sample ID: LCS-05255 Batch ID: R34365 Test Code: TPHTW Units: µg/L Analysis Date: 4/13/05 4:28:32 PM Prep Date:
 Client ID: Run ID: ORGC8_050413B SeqNo: 498172

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Paint thinner	542.8	50	500	0	109%	70	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

CLIENT: Pierson Building Center
Work Order: 0504027
Project: 091148.100, Pierson's Building Center

QC SUMMARY REPORT
 Laboratory Control Spike Duplicate

Sample ID: LCS-D-05255 Batch ID: R34365 Test Code: TPHTW Units: µg/L Analysis Date: 4/13/05 5:03:59 PM Prep Date:
 Client ID: Run ID: ORGC8_050413B SeqNo: 498173
 Analyte Result Limit SPK value SPK Ref Val % Rec LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

TPH-Paint thinner 536.9 50 500 0 107% 70 120 543 1.10% 20

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

